

H.264 NETWORK Embedded DVR

USER MANUAL



CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER. NO USER SERVICABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the products' enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF THE PLUG TO THE WIDE SLOT AND FULLY INSERT.

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1. INTRODUCTION

1.1. PREODUCT INTRODUCE

The serial of DVR include 4 channels,8 channels and 16 channels ,that is CIF (D1) resolution digital video recording DVR, which have local recording, playback, support triple code remote network surveillance, data backup, parameter setting, motion detection, I/O alarm setting, PTZ and USB mouse, USB2.0 backup, IE browser and back up etc.

1.2. PRODUCT FEATURE

- ✧ H.264 compression
- ✧ Two USB interface, USB2.0 for data backup, USB2.0 for mouse operation.
- ✧ Support 1 pcs 3.5" SATA HDD at most.
- ✧ Special file system for security.
- ✧ 16 bit color translucent user-friendly GUI, with notes for selected menu items
- ✧ Optimized one four channel simultaneously playback
- ✧ double level user management
- ✧ Support the live view, parameter setting and copy playback video via network.

1.2.1. SPECIFICATION

General version 4CHs, 8CHs and 16CHs specification

Module	4CH	8CH	16CH
Picture compression	H.264		
Video in	1.0Vp-p/75Ω, BNC×4	1.0Vp-p/75Ω, BNC×8	1.0Vp-p/75Ω, BNC×16
Video out	1.0Vp-p/75Ω, BNC×1; VGA×1		1.0Vp-p/75Ω, BNC×1; SPOTX1;VGA×1
Resolution	Live: D1 Record: 2CH D1, 2CH CIF	Live: D1 Record: 8CH CIF	Live: D1 Record: 1CH D1, 15CH CIF
frame rate	PAL : 100 Fps(CIF) NTSC :120 Fps(CIF)	PAL :200 Fps(CIF) NTSC :240 Fps(CIF)	PAL : 400 Fps(CIF) NTSC : 480 Fps(CIF)
Audio input	RCA×4	RCA×8	RCA×16
Audio output	RCA×1		
Audio codec	ADPCM		
Alarm input	4 alarm input	8 alarm input	16 alarm input
Alarm output	1 alarm output	2 alarm output	2 alarm output
Video mode	Manual recording , Scheduled recording, Movement alarm video and External alarm recording		
Network interface	RJ45,100M/1000M		

PTZ	support		
communication interface	RS485×1, USB2.0×2		RS485×1, RS232×1, USB2.0×3
Data storage	Support 1 SATA HDD (300GB-2TB)		Support 2 SATA HDD (300GB-2TB)
Mouse	USB Mouse		
Remote control	Support		
voltage input	12V/3A		12V/5A
Appearance	DVR-07/20	DVR -07/20	DVR -15

Simple version 4CHs 、8CHs and 16CHs specification

Module	4CH	8CH	16CH
Picture compression	H.264		
Video in	1.0Vp-p/75Ω, BNC×4	1.0Vp-p/75Ω, BNC×8	1.0Vp-p/75Ω, BNC×16
Video out	1.0Vp-p/75Ω, BNC×1; VGA×1		1.0Vp-p/75Ω, BNC×1; SPOTX1;VGA×1
Resolution	Live: D1 Record: 4CH CIF	Live: D1 Record: 8CH CIF	Live: D1 Record: 16CH CIF
frame rate	PAL : 100 Fps(CIF) NTSC :120 Fps(CIF)	PAL :200 Fps(CIF) NTSC :240 Fps(CIF)	Non-real time, Max PAL :320 Fps(CIF), NTSC :400 Fps(CIF)
Audio input	RCA×1	RCA×4	
Audio output	RCA×1		
Audio codec	ADPCM		
Alarm input	4 alarm input		8 alarm input
Alarm output	1 alarm output		2 alarm output
Video mode	Manual recording , Scheduled recording, Movement alarm video and External alarm recording		
Network interface	RJ45,100M/1000M		
PTZ	support		
communication interface	RS485×1, USB2.0×2		

Data storage	Support 1 SATA HDD (300GB-2TB)	Support 2 SATA HDD (300GB-2TB)
Mouse	USB Mouse	
Remote control	Support	
voltage input	12V/2A	12V/3A

1.2.2. BASIC WORKING PARAMETER

Item	Parameter	Description
Voltage input	12V	DC 12V
Video impedance input	75Ω	75Ω Each channel.
Video output	1Vp-p	1Vp-p CVBS signal
I/O	0—2V	Low voltage alarm
	5V-30v	High voltage alarm
RS232		Serial port, for extend use(16channels)
RS485		Connect to PTZ, (Pelco-D,Pelco-P)
SATA HDD		One SATA HDD with mainstream capability(16 CH support two SATA HDDs)

1.3. ENVIRONMENT ADAPTABILITY

For safety while using the DVR and to prolong device life, please pay attention to the following details:

- 1) When installing device, please comply with all the electric product safety criteria.
- 2) Power and ground:
 - ◆ Do not touch the power and DVR with a wet hand
 - ◆ Do not drop liquid on DVR
 - ◆ Do not put any object on DVR
 - ◆ Please use soft dry cloth to clean DVR; do not use chemical impregnant.
 - ◆ The Device will have voltage before startup if the power line is connected to power Source.
 - ◆ Please unplug power line from power source if the Device is not intended to be used for a prolonged time.

2. DEVICE OPERATION

In device operation, the enter key on remote control has the same function as left click of the mouse.

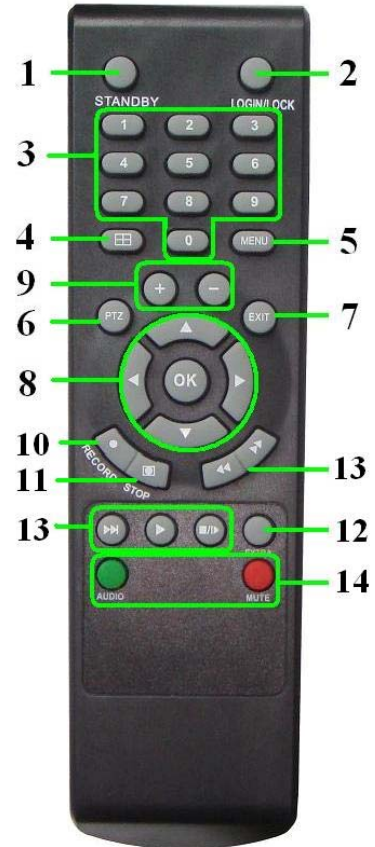
2.1. REMOTE KEY INSTRUCTION

2.1.1. REMOTE CONTROL

The remote control is the secondary input device
For navigating the system's interface.

To use the remote control:

1. **STANDBY**: Press to turn on/off standby mode.
2. **LOGIN/LOCK**: If "Security" has been enabled in the Setup menu, press to open the user password login screen.
3. **Number/Channel buttons**: While in menus, press buttons 0~9 to enter values; during live viewing, press to view channels in full-screen.
4. **Full Screen**: Press to switch between quad and split-screen displays.
5. **MENU**: Opens the main menu.
6. **PTZ**: Press to open the PTZ control window.
7. **EXIT**: Close menu windows.
8. **Navigation/OK**:
 - **▲**: Move cursor in menus up, Channel Up
 - **▶**: Move cursor in menus right, Channel Up, during playback, increase forward playback speed (2X, 4X, 8X, 16X, 32X).
 - **◀**: Move cursor in menus left, Channel down, during playback, increase reverse playback speed (2X, 4X, 8X, 16X, 32X)
 - **▼**: Move cursor in menus down, Channel down
 - **OK**: In menus, press to confirm selections;
9. **+/-**: In menus, press to adjust values.
10. **RECORD**: Press to start manual recording.
11. **STOP**: Press to stop manual recording.
12. **EXTRA**: For the future use.
13. **Playback controls**:
 - **◀◀**: Increase reverse playback speed 2X, 4X, 8X, 16X, 32X;
 - **▶**: Press to start playback;
 - **▶▶**: Press to increase forward playback speed 2X, 4X, 8X, 16X, 32X;
 - **⏮**: Press to slow playback speed by 1/2, 1/4, 1/8, 1/16, 1/32;
 - **⏸**: Press to freeze playback to one frame, then press again to advance frame-by-frame
14. **AUDIO/MUTE**: Turn on/off audio



TIP: When using the remote control to enter password and camera titles, select the field using the navigation buttons press ENTER, and then press the number buttons.

2.1.2. Use Remote controller to select the device number:

Press **【LOGIN/LOCK】** key, and enter device number, then you can control the device by this remote control. (Device number is available in **【PASSWORD】**)

For example. Select the device with number "000001".

Press **【LOGIN/LOCK】** + **【1】** ,then the remote controller can control this device.

Remark:

1. Remote controller can control the device with number "000000" as default.
2. If press **【LOGIN/LOCK】** + **【0】**, then the remote controller can control device with any number.
3. The number of device should be smaller than 000255.

2.1.3. MOUSE OPERATION

The mouse is the primary input device for navigating system menus.

NOTE: Unless otherwise noted, all system functions described in this manual are achieved through mouse input.

To use a mouse with the system:

- 1) Connect a USB mouse to the **USB MOUSE port** on rear panel of the system.

NOTE: Only the top USB port on the rear panel is designed for data backup to a USB flash drive. Do not connect a USB flash drive to the bottom USB port on the rear panel.

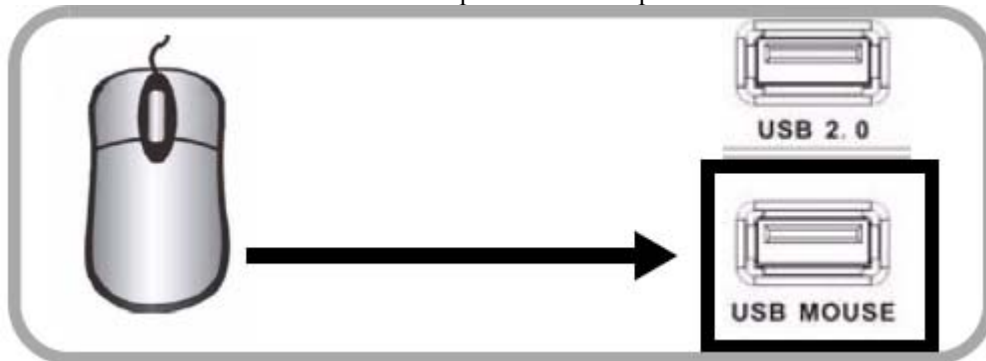


Figure 1.0 Connect a USB mouse to the bottom USB port on the rear panel

- 2) Use the mouse buttons to perform the following:
 - **Left-Button:** Click to select a menu option; during live viewing in split-screen, double-click on a channel to view the selected channel in full-screen.; double-click the channel again to return to split-screen view
 - **Right-Button:** Click to open the Sub-Menu
- 3) **Scroll-Wheel:** No function.

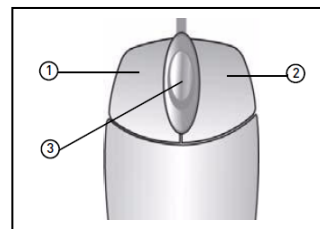
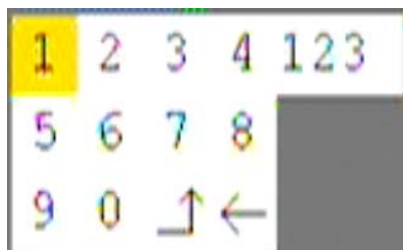



Figure 1.1 Mouse button operation

When using the mouse, you can input certain values using the onscreen virtual keyboard. You will need to use the Virtual Keyboard when entering your User ID and Password.


- 4) Virtual **Keyboard** (Mouse)

To use the Virtual Keyboard:



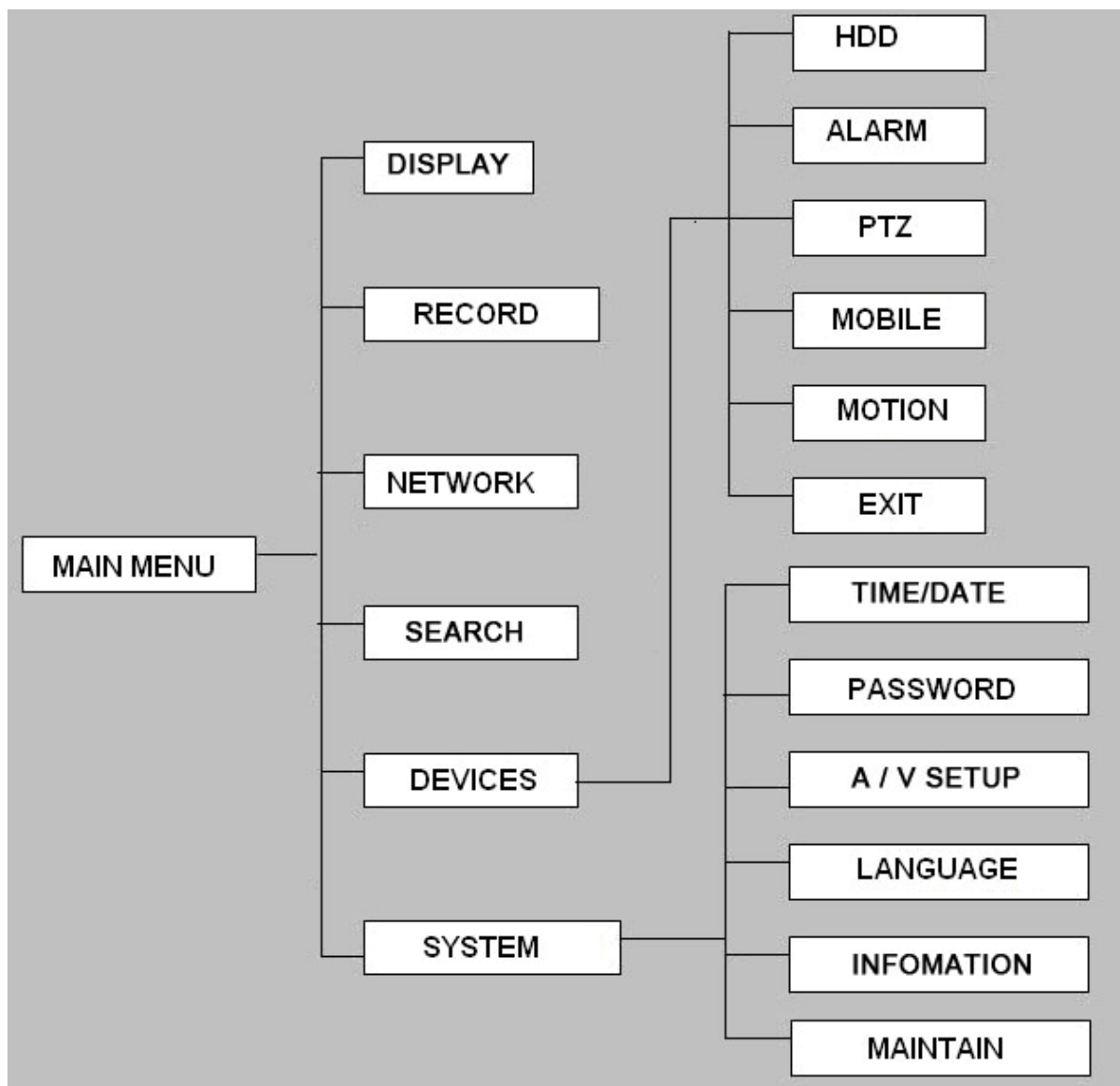
1. Click on an option or field, such as the User ID and Password fields.
2. Click 0~9 to key-in the desired digit.
3. Click **123** to switch between numerals, upper and lowercase letters, and other characters (only for certain options)
4. Click  to Backspace/Delete.

NOTE: The buttons will turn from orange to white when you select the button with the mouse cursor.

5. Click  to enter/confirm and close the Virtual Keyboard.

2.1.4. MENU TREE

You can control the DVR by a lot of menu operation. This tree will show you the menu structure and it will be in details in after chapter.



2.2. SYSTEM OPERATION

2.2.1. USER LOGIN

2.2.1.1 STARTING THE SYSTEM

To power the system ON/OFF:

Connect the power cable to the DC 12V port on the rear panel. At startup, the system performs a basic system check and runs an initial loading sequence. After a few moments, the system loads a live display view.

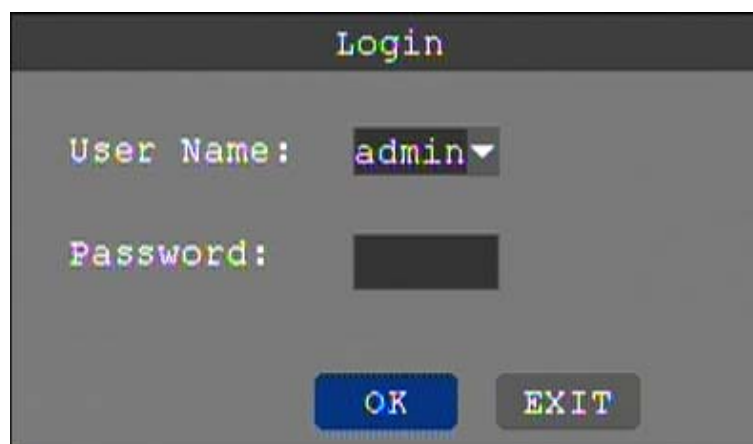
ATTENTION: By default, passwords are **disabled** on the system. You do not need to enter a password when accessing any system menus. However, for security purposes, it is highly recommended to enable passwords on the system using the Password Menu.

NOTE:

- 1) If there is no HDD in device, or the device didn't read the HDD, or the HDD didn't be formatted it will display an **【H】** in the video preview interface.
- 2) You must format the HDD in the DVR before first using. The steps as follows: MainMenu > Device>HDD management > format. After formatting, the system will restart.

2.2.1.2 SYSTEM LOGIN

Login the main menu: Right-click anywhere on the screen, it will pop-up a menu list, then select [main menu]; If use remote controller or front panel, just press [MENU] button.



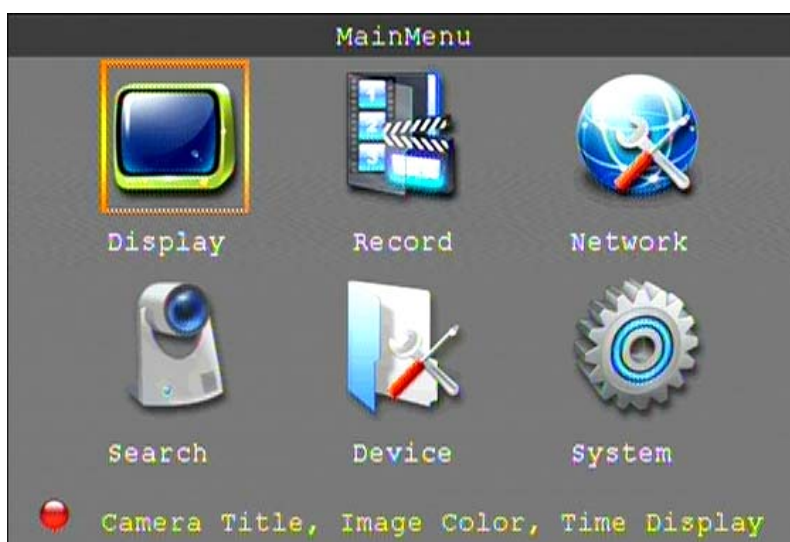
Username: Click the User Name drop-down box, select your user name. If you want to register another user to login, please select [admin] to login, and choose:[Main Menu]-[System]-[Password], to open the another user.

Password: Enter the correct password.

Note: The default system password is enabled, every time you boot into the system requires you to enter the password for the user name to enter the system. (System Administrator [admin] default password is: 123456), or (default password of [user1] is: 123456)

2.2.2. GUI OPERATION

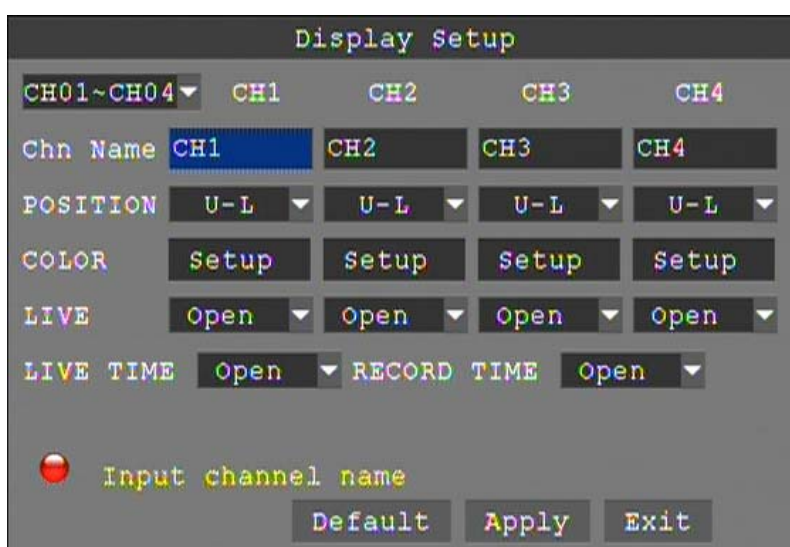
The main menu include “DISPLAY” ,” RECORD” ,” NETWORK” ,” SEARCH” , “DEVICES” ,and “SYSTEM” .



Remark: You must after pressing “APPLY” to make the setting for submenu valid. It will no use when exit directly. This DVR have a special feature is: when you move the mouse to everywhere, there will have the explanation information showed auto.

2.2.2.1 DISPLAY

Move the cursor to **【DISPLAY】** (Icon with the orange box means that selected) , press **【Enter】** to enter into the setting interface.

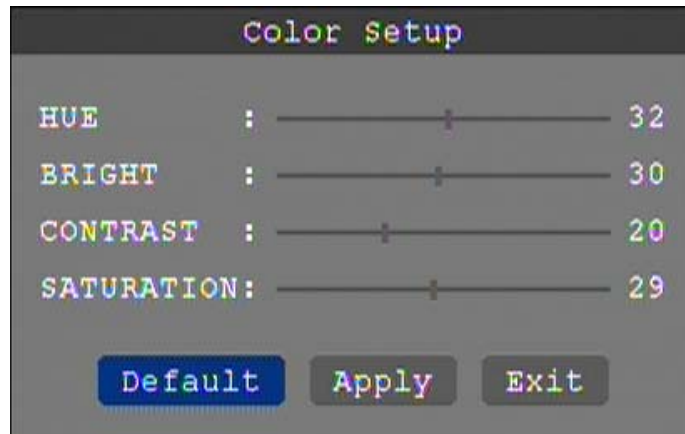


CH01~CH04: click to pop up pull-down box to switch to other channel to carry out setting.

CHN NAME: press **【Enter】** to enter into the setting interface.

POSITION: press **【Enter】** to switch name location, there are 5 options.

COLOR: press **【Enter】** to enter into setting interface, as following:



Press **【Enter】** or **【+】** **【-】** key or directly drag the cursor to set colors, including chroma, brightness, contrast and saturation, press **【APPLY】** to save the parameters.

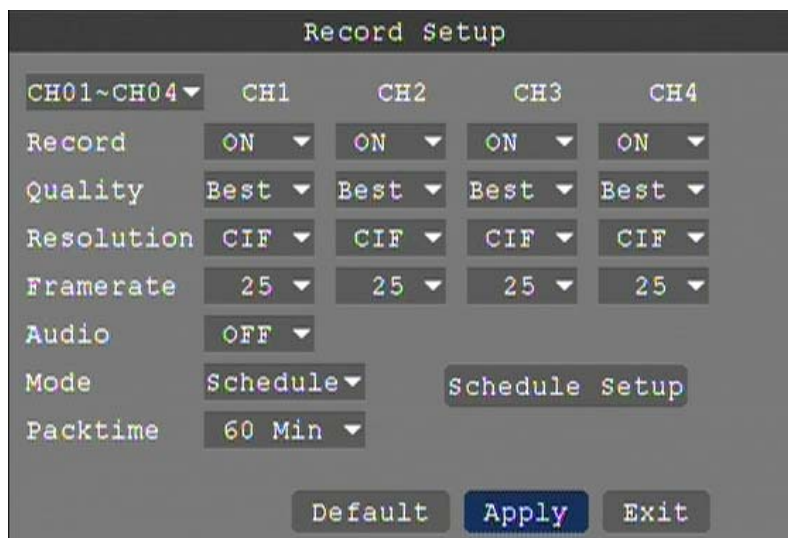
LIVE: Open: Means the channel is allowed to view the live mode, Close means not.

LIVE TIME(display time while in live view): Open: Means yes, Close means not.

RECORD TIME(display time while recording): Open: Means yes, Close means not.

2.2.2.2 RECORD SETUP

Move the cursor to **【RECORD】** (Icon with the orange box means that selected) ,press **【Enter】** to enter into the setting interface. Press **【Confirm】** and enter into the setup interface, and you can use direction keys and cursor to change the options.



CH01~CH04: click to pop up pull-down box to switch to other channel to carry out setting.

RECORD: Open: Means the channel enable for recording.

QUALITY: There are three options, corresponding different data stream standard.

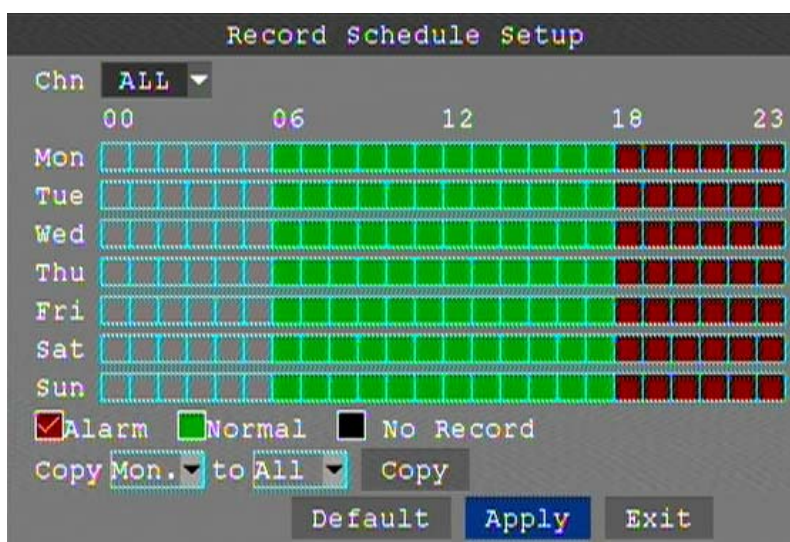
RESOLUTION: there are three corresponding resolutions: D1, HD1, CIF.

AUDIO: Open: Means enable the audio recording for all channels, Close: Means disable audio recording

REC.MODE:

Always: Means the device will start recording when it startup.

Schedule: Recording as the schedule, you can setup the schedule as you want as follow.



CHANNEL: You can select all channels or just one channel to setup schedule.

WEEKLY: You can setup each as you want. There are ALARM, NORMAL, NO REC three modes, if you select this, there will have a √ in the frame, that means when you select the period of the day it will record as this mode, and you can just setup one day, then copy the setting to all other days. Different color means different record mode: Red means alarm record, green means normal record, grounding means no record.

PACK TIME: There are 15min, 30min, 45min, 60min four options, that means it will pack as the mode you selected

Scroll to **APPLY** and press **ENTER** to save the new settings.

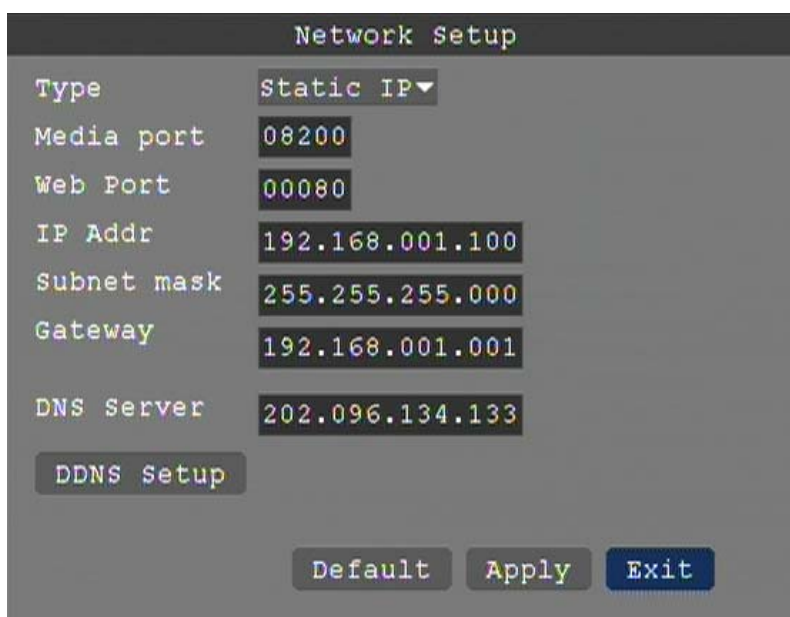
2.2.2.3 NETWORK SETUP

Move the cursor to **【NETWORK】** (Icon with the orange box means that selected), and press **【Enter】** to enter into setting interface .

TYPE: There are PPPOE, DHCP & Static three options.

● STATIC

Select [Static] in the type, and press [Enter] to enter into the interface as followings



PORT: For video transmission via IE.

WEB PORT: setup the port of IE browser via HTTP.

IP ADDRESS: setup the IP address, and press [Enter] or number keys to change the value.

NETMASK: press [Enter] or number keys to change the value.

GATEWAY: press [Enter] or number keys to change the value.

● **DHCP**

Select the DHCP, and enter into the interface as followings.

The screenshot shows the 'Network Setup' menu with the following fields and values:

Field	Value
Type	DHCP
Media port	08200
Web Port	00080
IP Addr	172.020.100.174
DNS Server	202.096.134.133

Below the fields is a 'DDNS Setup' button. At the bottom are three buttons: 'Default', 'Apply', and 'Exit'.

PORT: the communicate port between PC and DVR, recommend use default port.

WEB PORT: setup the port of IE browser via HTTP.

Remark: when you setup the net mode as DHCP, the router will arrange a dynamic IP for DVR.

● **PPPOE**

Select the PPPOE, and enter the interface as followings

The screenshot shows the 'Network Setup' menu with the following fields and values:

Field	Value
Type	PPPOE
Media port	08200
Web Port	00080
Username	
Password	
DNS Server	202.096.134.133

Below the fields is a 'DDNS Setup' button. At the bottom are three buttons: 'Default', 'Apply', and 'Exit'.

MEDIA PORT: the communicate port between PC and DVR, recommend use default port

WEB PORT: setup the port of IE browser via HTTP.

PPPOE username and password: fill the username and password of the internet service offer, and apply it and reboot the system. After rebooting, the device will save it and set the PPPOE as default network type. If succeed, the IP address will be automatically config as dynamic IP of WAN.

DDNS Setup

DDNS: Open

Server: 3322

Hostname:

Username:

Password:

Default
Apply
Exit

DDNS: There are [Open/Close], and if there is a DDNS service, please setup it as Open.

SERVICE: User can select required DDNS server, there are 6 options: 3322, dyndns, perfecteyes, netnvr, nvrddns.com; among others netnvr, nvrddns domain name can be registered directly through DVR. Registration and method of use see appendix 1.

HOST NAME: Input the name of the host server.

USERNAME: Input in the name of the user.

PASSWORD: Input the password for DDNS.

2.2.2.4 SEARCH

Move the cursor to **【SEARCH】** (Icon with the orange box means that selected), press **【Enter】** to enter into the setting interface.

DATE: You can adjust the checking date and time, press **【Enter】** input the number directly to adjust the year, month, date. After finishing the time setting, move the cursor to “SEARCH” and press “APPLY”, can see the recording status of this date. As follow:

Record Search

Chn: All Date: 2010-10-15 Search 08:54 Play

Record State

OCT.	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

15th	00	01	02	03	04	05	06	07
	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23

● Start to search the Record file

Detail files
Log
Exit

Instruction:

1. MONTH: It will show all the recording status in this month. Green means normal recording, Red means alarm recording, Grounding means no recording. Click any date in this frame can search the recording status of that day, the searching result will be showed in the below date frame.

2. DAY: It will show all the recording status in this day, you can playback the record file in this period via click the corresponding period.

PLAY: You can press **【Enter】** input number directly to setup playback time. After setting, move the cursor to “PLAYBACK”, and then press “APPLY” to enter into video playback of that time. Also you can

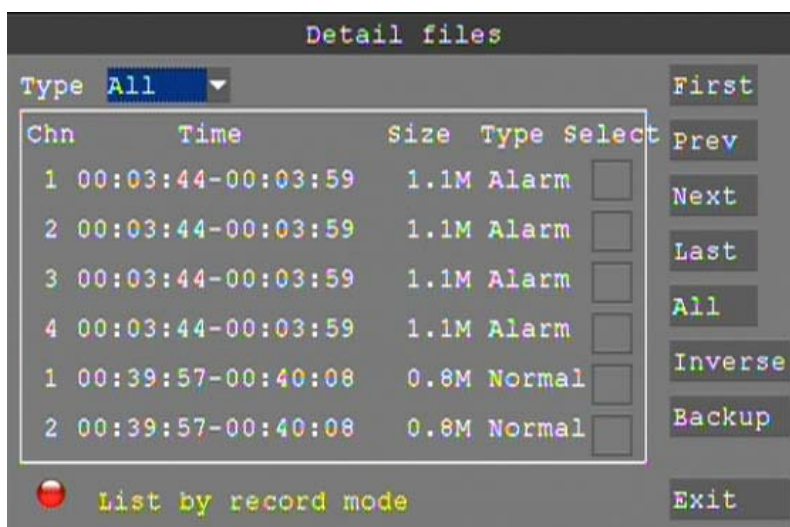
select any period of time in the video status frame after searching,press"APPLY"to enter into the video playback of this period.

DETAIL FILES: Enter into the video file list interface of the selected date.

LOG SEARCH: Enter into the log searching interface.

2.2.2.5 DETAIL FILES

Setup the searching date, after pressing "SEARCH",move the cursor to "Detail files" and press"APPLY"to enter into the video file list of this date.



Then you can select four channels as you want to playback, because 8CH DVR support 8channels playback at the same time. By the way 16CH DVR support 16 channels playback at the same time.



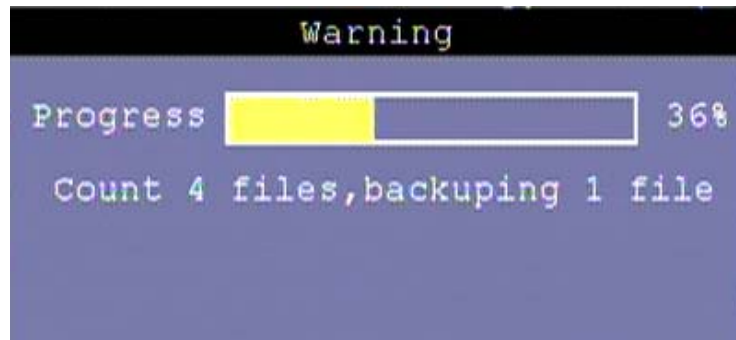
Instruction:

1. **【DETAIL FILES】**,"CHANNEL" is the recording file which belong to which channel, "SIZE" is display the size of this file (Unit:MB) , "TYPE" is display the type of recording file, there are two types: normal and alarm,press"BACKUP"button can export the selected files to USB storage;
2. After moving the cursor up and down and select the files, and press**【APPLY】**to enter into playback interface. If the all channels have recording files, it will be playback all windows at the same time.
3. If setup as "Open" in the **【RECORD TIME】** in **【DISPLAY】** , it will show the date/time when playback record file; If setup as "Close"it will not display time.
4. When playback, can press **【>>>】** to play slowly; press **【>>>】** and **【<<<】** to speed、reverse play; also can press**【>>>】**to pause and frame by frame play; Press**【Exit】**to exit from playback and return to the former menu;
5. When finished playback files, it will return to the file list interface.

2.2.2.6 BACKUP

You can use USB for backup, should insert USB device into the USB2.0 port before backup files. And it is support USB OTG.

You can select the recording file by direction keys, and press **【Enter】** means selected OK (There is a “√” at the end of the selected recording files) and press **【Enter】** again the “√” will disappear that means cancel the select, we can start export the recording files after selecting, and press **【BACKUP】** to start to backup, as follow:

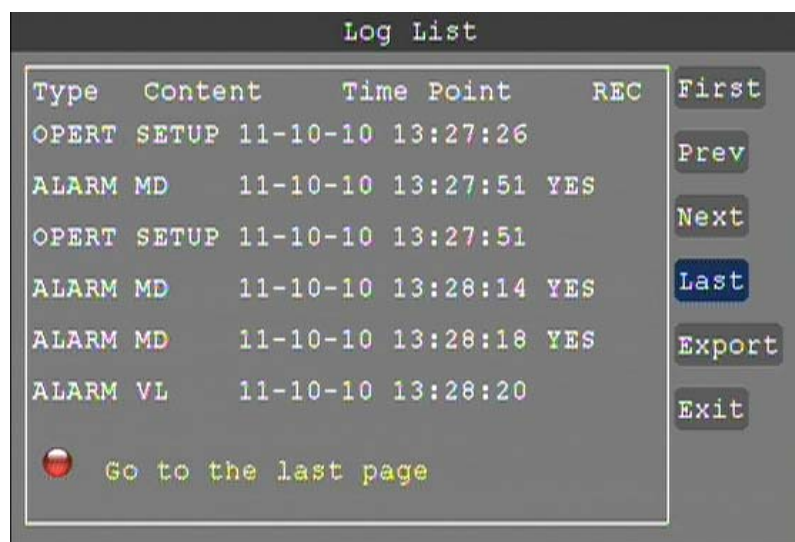


Instruction:

1. When the space in backup device less than recording file, the system will prompt “Space no enough”.
2. You can move USB device directly when backup finished.

2.2.2.7 LOG SEARCH

Move the cursor to “LOG SEARCH” and press “APPLY” to enter into the log file list of DVR, as follow window.



INFO: means the alarm type.

TRIGGER: means the alarm triggered time.

VIDEO: means whether the log has corresponding video file.

2.2.3. DEVICES SETUP

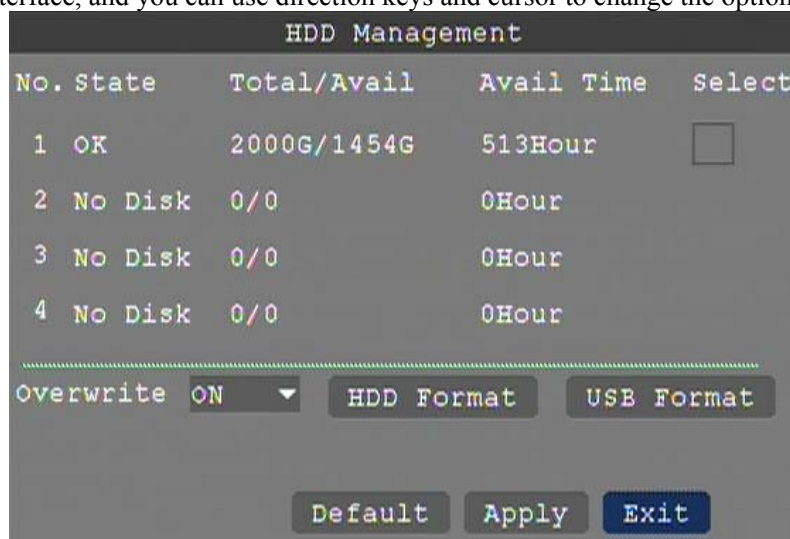
Move the cursor to **【DEVICES】** (Icon with the orange box means that selected) ,press **【Enter】** to enter into setting interface.



Advanced Features include HDD, ALARM, PTZ, MOBILE and MOTION DETECT.

2.2.3.1 HDD MANAGE

Move the cursor to **【HDD】** (Icon with the orange box means that selected), press **【Enter】** to enter into the setting interface, and you can use direction keys and cursor to change the options.



HDD STATUS: There status is ok means the HDD is ok. If HDD can not run normally (including unformat and no HDD), there is a **【H】** display on video live view, 8CH DVR can support 1HDD at most. so you can select the HDD you want to format here.

OVERWRITE:ENABLE: means when HDD space less than 4G, it will delete HDD earliest recording file, and it will stop deleting when the space is 10G; **DISABLE:** means when HDD space less than 500M it will stop recording, and an prompt will display in live view “please shutdown and replace HDD”

HDD FORMAT: Move cursor there to select device and press **【APPLY】** to start formatting.

U DISK FORMAT: format the external thumb drive.

2.2.3.2 ALARM SETUP

Move the cursor to **【ALARM】** (Icon with the orange box means that selected), press **【Enter】** to enter into setting interface.

Alarm Setup

CH01~CH04	CH1	CH2	CH3	CH4
I/O Alarm	NO	NO	NO	NO
HDD Loss	Open		No Space	Open
Video Loss	Open			
Alarm Control Output	10sec	Buzzer	Close	
Duration	1min	Pre Rec	Close	

Email Setup

Alarm while no HDD found

Default Apply Exit

CH01~CH04: click to pop up pull-down box to switch to other channel to carry out setting.

I/O ALARM: Each channel has an I/O status, that is, when an alarm triggered, it will activate the corresponding channel to start alarm recording.

N.O: indicate I / O input level from high to low effective

N.C: indicate I / O input level from low to high effective

HDD LOSS:Open means it will trigger a alarm if there is no HDD, and it will display an **【H】**

On the bottom left of channel 1 in the live view

HDD SPACE: Open: If the space less than 500M, there is a remark in live view: No enough space, please change HDD after shutdown.

VIDEO LOSS: Open: when one channel has no video input, it will display “video loss” in live view.

ALARM CONTRL: There are alarm output, buzzer Duration and pre Rec four items.

- **OUTPUT:** when an alarm triggered, the alarm output time will be:
0 second、 10 seconds, 20 seconds, 40 seconds and 60 seconds
- **BUZZER:** buzzer calling time setup when alarm triggered: close, 10 seconds, 20 seconds, 40 seconds and 60 seconds
- **DURATION:** post recording time setup: 30 seconds, 1 minute, 2 minutes and 5 minutes
- **PRE REC:** Close/Open

Email setup

Email Setup

Email Enable

SSL ☒ OFF ☐ ON

SMTP Port 00000

SMTP Server

Sender Email

Sender Pwd

Receiver Email

Interval 3min

Default Apply Exit

Functions

Email	Enable: Open	Disable: Close
SSL	Enable: Open	Disable: Close
SSL is a security link transport protocol. You can encrypt your communication info (including your email) using SSL to prevent hackers from monitoring your email or communication info and even your password. Please confirm with your email service provider if your email server support SSL or not.		
SMTP Port	The Specified sender port of SMTP server(forwarding server/Host)	
Generally the SMTP port value is 25 ,but for SMTP port of G-mail server is 465. *if your E-mail needs to be verified by SSL, the port is going to be 465(default value), and port 25(default value) is the Email without SSL verification.		
SMTP server	Simple Mail Transfer Protocol (SMTP) is an Internet standard for electronic mail(e-mail) transmission across Internet Protocol (IP) networks.	
Sender Email	The original sender (forwarding server/Host).	
Sender PWD	Password of original sender	
Receiver Email	The target receiver of alarm notification (target).	

2.2.3.3 PTZ SETUP

Move the cursor to【PTZ】 (Icon with the orange box means that selected) ,press【Enter】to enter into setting interface, you can setup the parameters for each channel separately.

CH01~CH04: click to pop up pull-down box to switch to other channel to carry out setting.

PROTOCOL: select the protocol of different PTZ, there are two protocols to switch, and the default is Pelco-D

BAUD RATE: select the different baud rate for your PTZ, there are 1200, 2400, 4800, ,9600,38400,57600 and 115200.

DATA BIT: there are 5,6,7,8 options to select, default setting is 8.

STOP BIT: there are 1and 2 to select, the default setting is 1.

PARITY: there are None/Odd/Even/Mark/Space to select, the default setting is none.

CRUISE: ON means open the scanning auto-cruise function for corresponding channel,

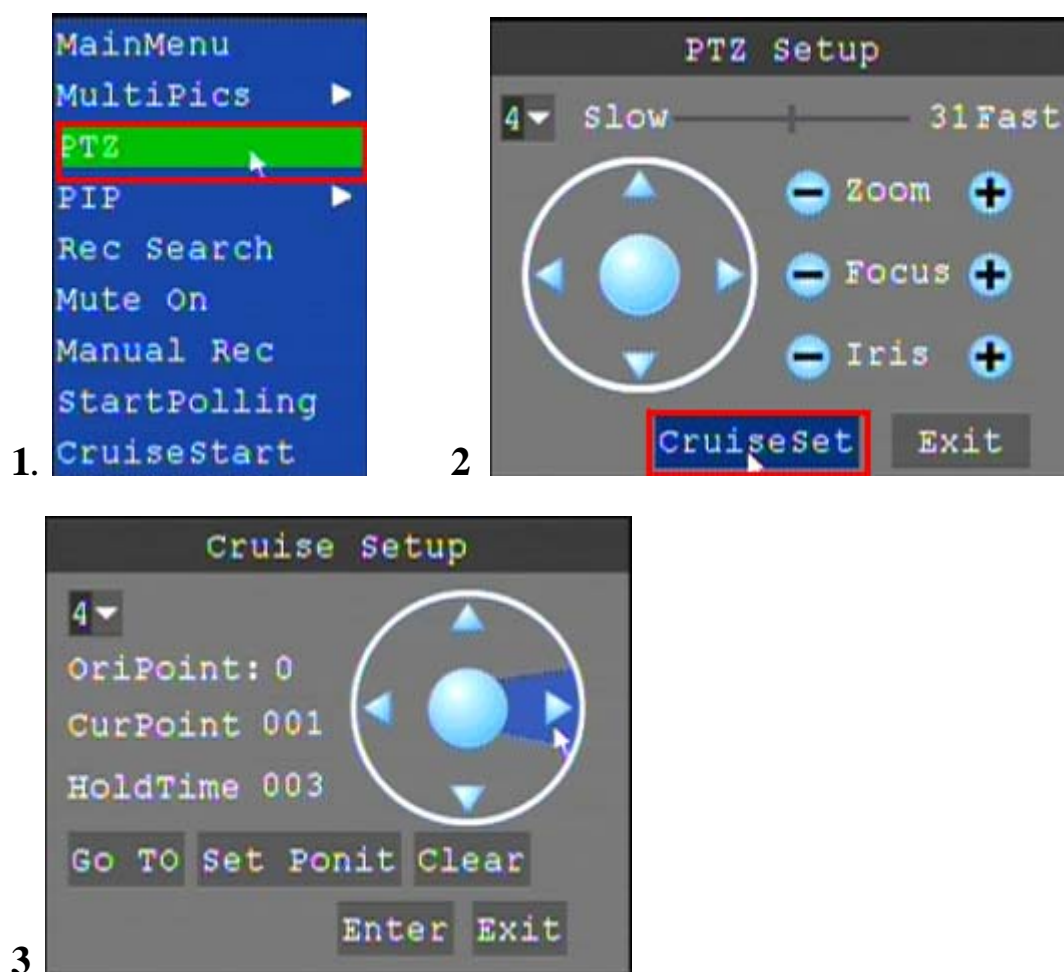
OFF means not open

ADDRESS: Fill the code of respective PTZ

	CH1	CH2	CH3	CH4
CH01~CH04	CH1	CH2	CH3	CH4
PROTOCOL	abk-2007	abk-2007	abk-2007	abk-2007
BAUD RATE	9600	9600	9600	9600
DATA BIT	8	8	8	8
STOP BIT	1	1	1	1
PARITY	None	None	None	None
CRUISE	Off	Off	Off	Off
ADDRESS	001	002	003	004

Buttons: Default, Apply, Exit

PTZ Control

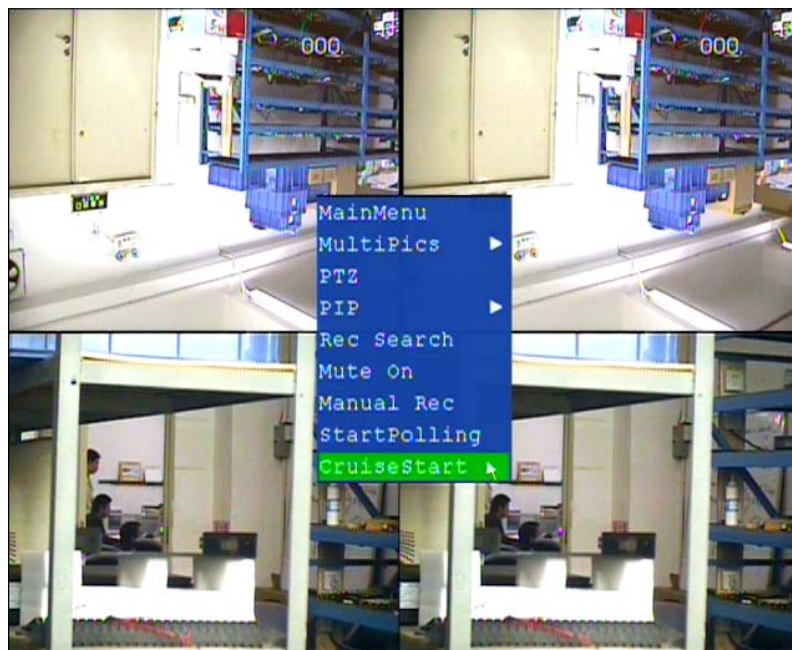


All Functions		
	Pointer Auto Pan	To select the direction of PTZ The middle circle is for auto pan of PTZ.
	Zoom in/zoom out	
	Focus	
	Iris	
	Volume	PTZ control the speed

1▼	Channel select	For selecting the channels of PTZ camera.
CruiseSet	Cruiseset	To cruise setup
Exit	Exit	To back to previous page or exit
Go To	Go to preset point	Allow you to go to a specific preset point.
Set Ponit	Set Ponit	Allow you set a set of specific preset points of a PTZ camera. Also it can Adjust the camera in a fix point.
Clear	Clear	Allow you to delete the selected preset
OriPoint: 0	Oripoint	Set up pre-set bit quantity
CurPoint 001	Curoint	It indicates the starting point cruised. System default point is 01.
HoldTime 003	Holdtime	Sets the stop time at each point
Enter	Save	Save the changed and the preset point.

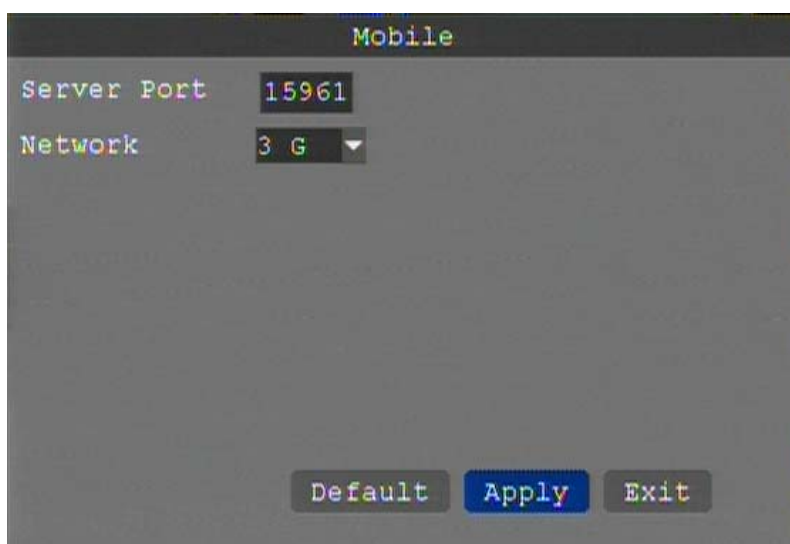
Cruise(PTZ)

This function allows to start cruise of PTZ camera. (accouding the presetting point to auto-cruise)



2.2.3.4 MOBILE

Move the cursor to【MOBLE】 (Icon with the orange box means that selected), press【Enter】to enter into setting interface.



USER NAME:The login user name of DVR

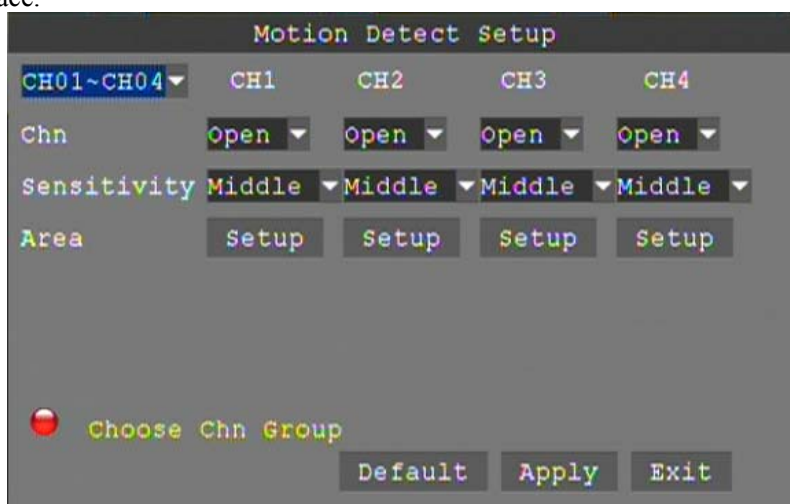
PASSWORD:The login Password of DVR

PORT: the port for mobile view, you should open the port in the router for mobile view. Please note that the server port of DVR must with the same port of mobile .

MOBLESS LAN: Select different mobile network from the options of WIFI, 2.5G, 2.7G,3G and WIFI, and press [Enter] to switch different network.

2.2.3.5 MOTION DETECT

Move the cursor to**【MOTION】** (Icon with the orange box means that selected),press**【Enter】**to enter into setting interface.

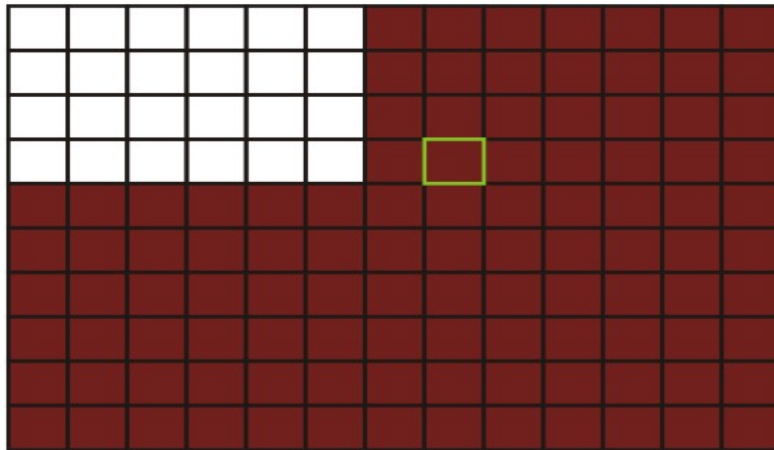


CH01~CH04:click to pop up pull-down box to switch to other channel to carry out setting.

STATUS: Each channel has corresponding channel switch, press **【Enter】**to turn on or turn off the motion detection for each channel..

SENSITIVITY:Each channel has corresponding sensitivity setting, including four standards highest,high,middle and low, press **【Enter】** key to switch

MD AREA: each channel has corresponding regional motion detecting setting, move the cursor to corresponding **【setting】**,press **【Enter】**to enter regional setting interface, red area means it have activated motion detection, transparent block means it have not activated motion detection.



Move the direction key on remote control to make cursor move in the small pane, green frame means the cursor has moved to this pane, press **【Enter】** to select or cancel motion detection of this small pane, when setup finished, press **【exit】** to back to MD setup interface, it will save automatically.

Remark:

IR Operation: press [Menu] key to select or cancel the entire screen.

Mouse operation: click left and drag the frame to setup the region for motion detection.

2.2.3.6 EXIT

Move the cursor to **【EXIT】** (Icon with the orange box means that selected), press **【Enter】** to back to main menu.

2.2.4. SYSTEM SETUP

Move cursor to select **【SYSTEM】** (Icon with the orange box means that selected) and press **【ENTER】** to enter into the system language setup interface.



System setups include time/date, password, video/audio, language, info and maintain six options.

2.2.4.1 DATE/TIME SETUP

Move cursor to select **【TIMEDATE】** (Icon with the orange box means that selected) and press **【ENTER】** to enter into the date/time setup interface.

DATE: Setup system date via numeric key.

DATE FORMAT: Press ENTER to switch between the date patterns, there are YY-MM-DD and MM/DD/YY two options.

TIME: Setup system time via numeric key.

TIME FORMAT: Press ENTER to switch between the date patterns, there are 12 HOURS and 24 HOURS two options.

Remark: You must press **【APPLY】** to save it, otherwise it won't save the modify if you exit this interface.

DST: DST settings, you can setup DST as you want here.

2.2.4.2 PASSWORD

Move the cursor to**【PASSWORD】** (Icon with the orange box means that selected), press**【Enter】**to enter into the setting interface.

Device ID: Press figures to set Device ID directly. After finished, if you want to control DVR by remote controller, you need to press [Login/Lock]+ Device ID first, then you can control it by remote controller. (Please check Chapter Three for the introduction of remote controller.)

User ID: Press [OK] to select user ID, it supports 5 User IDs.

User Name: You can change user name here. (Note: admin can not be changed)

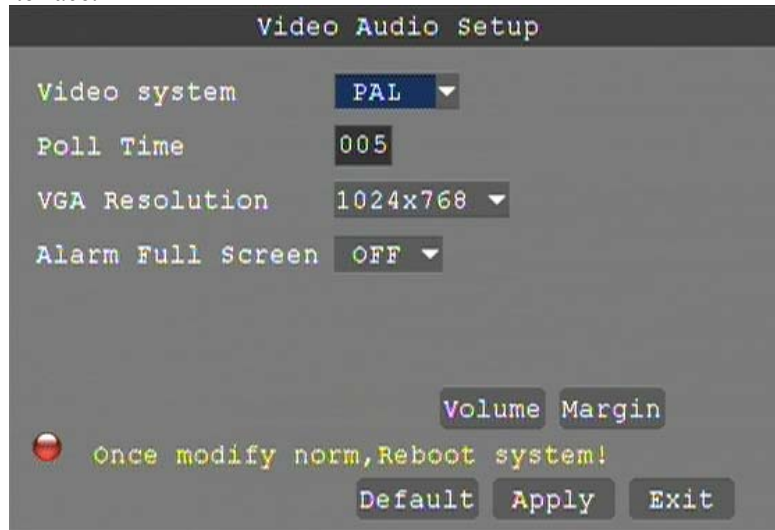
Password: Enter figures to set your passwords. (Note: max 6 figures; System Administrator [admin] default password is: 123456), default password of [user1] is: 123456)

User Right: [Control PTZ]: Have right to control PTZ

[Config. Argum.]: Have right to change system parameters settings.
[System Maintain]: Have right to maintain systems(Such as system upgrade, system default)

2.2.4.3 VIDEO/AUDIO SETUP

Move the cursor to **【A/V SETUP】** (Icon with the orange box means that selected) ,press **【Enter】** to enter into setting interface.



VIDEO SYSTEM: press **【Enter】** to switch camera system, has PAL and NTSC two options

POLL TIME: the interval for channel loop function

SEQUENCE: you can setup the channel sequence as you want here.

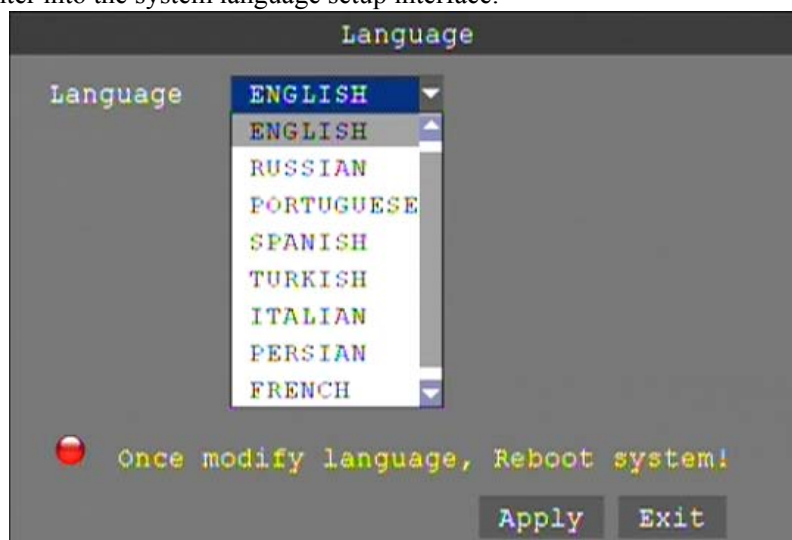
VGA RESOLUTION: press **【Enter】** key to setup the VGA resolution, there are 1024*768,1280*1024,1920*1080,1440*900 four options.

VOLUME: move cursor to **【VOLUME SETUP】** ,press **【Enter】** to enter into volume setup interface, press number keys or directly drag the cursor to adjust volume.

Remark: it will restart if you modify the Norm(video system) or VGA resolution.

2.2.4.4 LANGUAGE

Move cursor to select **【LANGUAGE】** (Icon with the orange box means that selected)and press **【ENTER】** to enter into the system language setup interface.



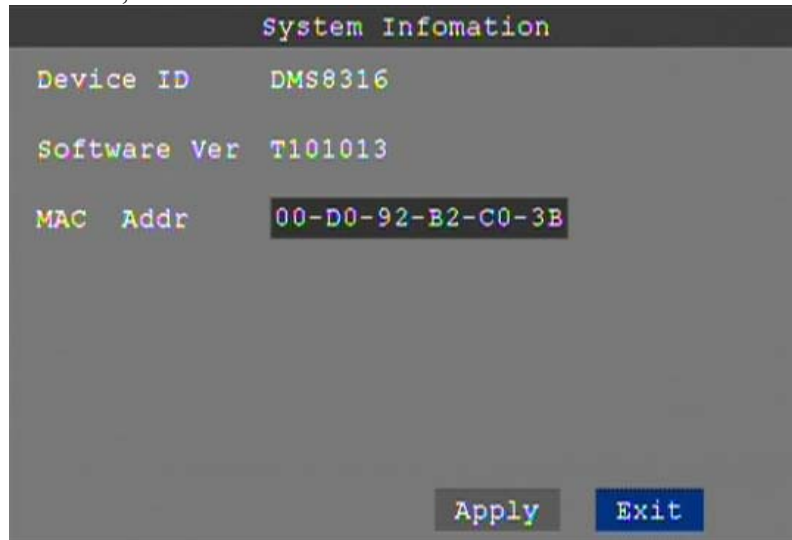
System language have

Chinese ,English ,Russian ,Portuguese ,Spanish ,Turkish ,Italian ,Persian ,French and Polish ten options, you can setup the language you want in here.

Remark: The device will restart when you setup system language success.

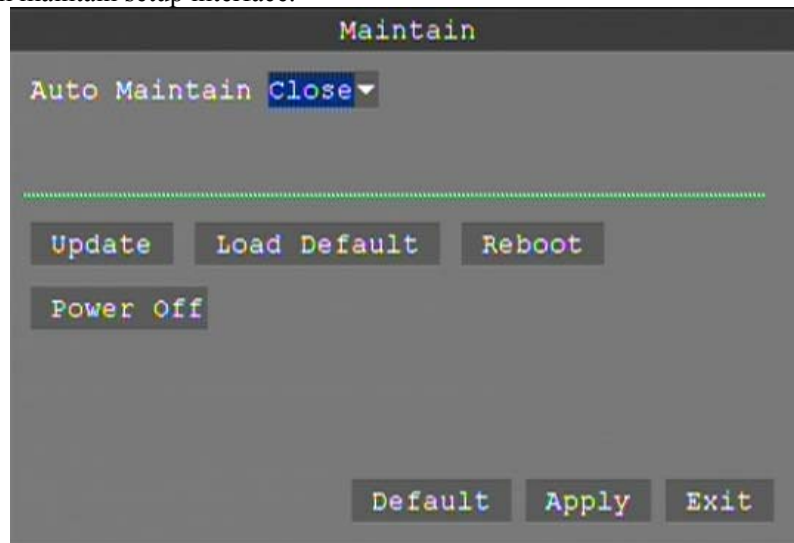
2.2.4.5 SYSTEM INFO

Move the cursor to **【INFOMATION】** (Icon with the orange box means that selected), press **【Enter】** to enter into setting interface, at this interface mainly display system hardware features and firmware version, include : Device ID, Software Ver and MAC Address.



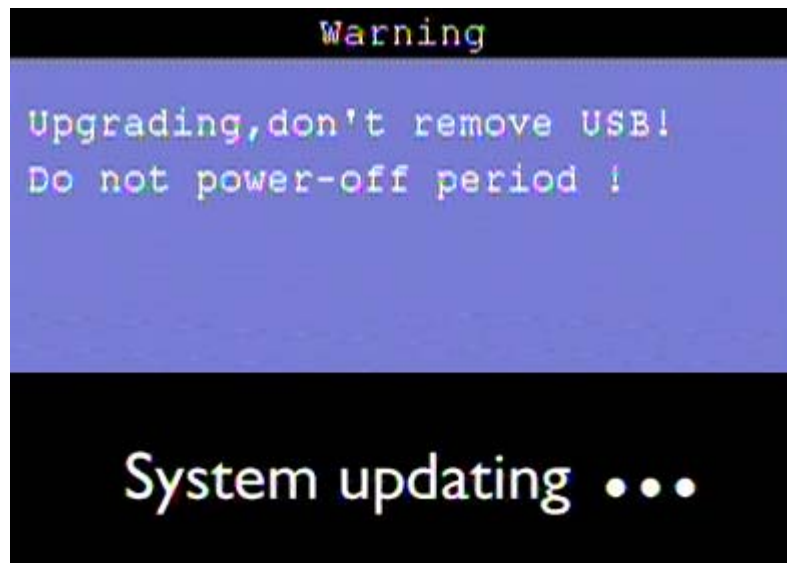
2.2.4.6 SYSTEM MAINTAIN

Move the cursor to **【MAINTAIN】** (Icon with the orange box means that selected), and press **【Enter】** to enter into system maintain setup interface.



AUTO MAINTAIN: When switch is on, you can setup the time for device to restart.

SYSTEM UPDATE: Copy the update file to the "dvrupgrade" folder in the root directory of the thumb driver, and insert it into USB 2.0, then press [Enter] to upgrade the firmware, and it will display the process of the system upgrading, as following.



REBOOT: means restart the device.

POWER OFF: The button allows to shut down the system from OSD.

3. IE OPERATION

3.1. REMOTE SETTINGS

3.1.1. NETWORK SECURITY SETTINGS

Please set internet security level before install ActiveX:

(1) Open IE Browser, select "Tools"->"Internet options"

(2) In the dialog box that appears, select the "Security" tab. (Figure 8-1)

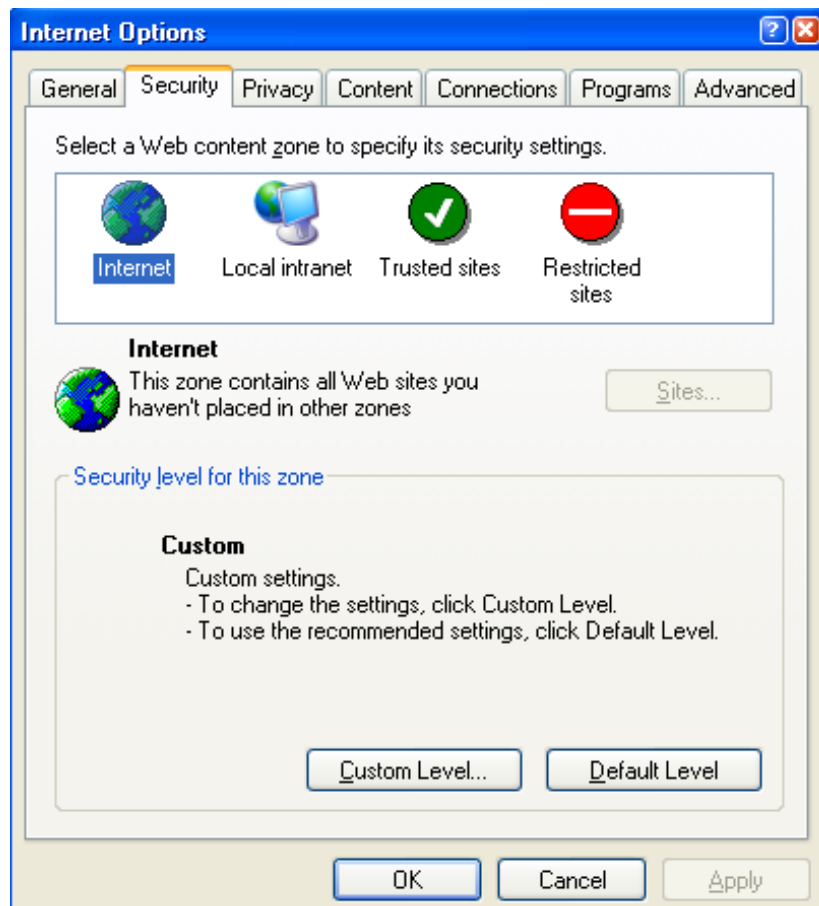


Figure 3-1

(3) click on the "Custom Level", enter the security settings. (Figure 8-2)

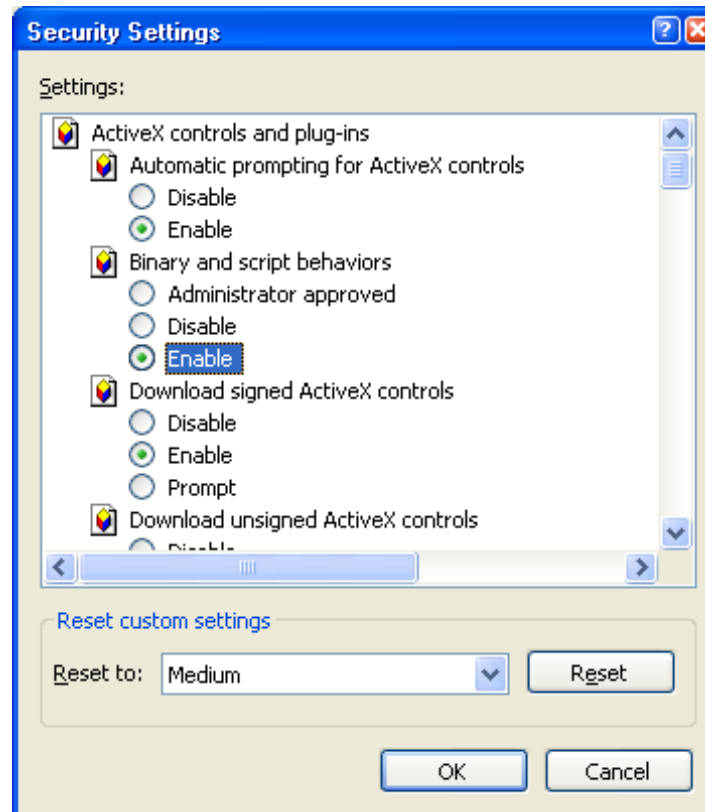


Figure 3-2

ActiveX controls and plug-ins installed

- ✓ ActiveX controls automatically prompt
- ✓ to the marked safe for scripting of ActiveX controls to execute script
- ✓ not marked as safe for the ActiveX controls Initialize and script
- ✓ Binary and script behaviors
- ✓ Binary and script behaviors
- ✓ Download signed ActiveX controls
- ✓ Run ActiveX controls and plug-ins

The above categories will be "Enable", which is very important.

Note: Install ActiveX; please close firewall and antivirus software.

3.1.2. CONNECTION SETTINGS

DVR through the remote access network, local area network connection, the client computer's IP address must be with the DVR at the same network segment, in the wide area network connection through the dynamic IP address or domain name to connect, when the two sides need to ensure that public network can access it. The following introduces the method of local area network connection settings:

1.right-click "My Network Places" in the pop-up menu, click on "Properties", open "Network Connections."

2.Double-click open the "Local Area Connection." (Figure 8-3)

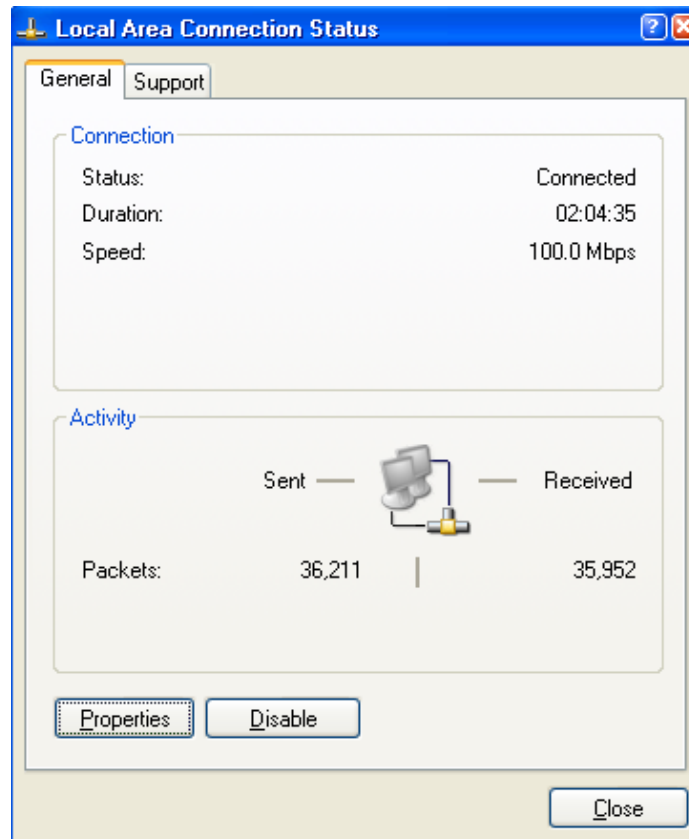


Figure3-3

3. Click "Properties." (Figure 8-4)

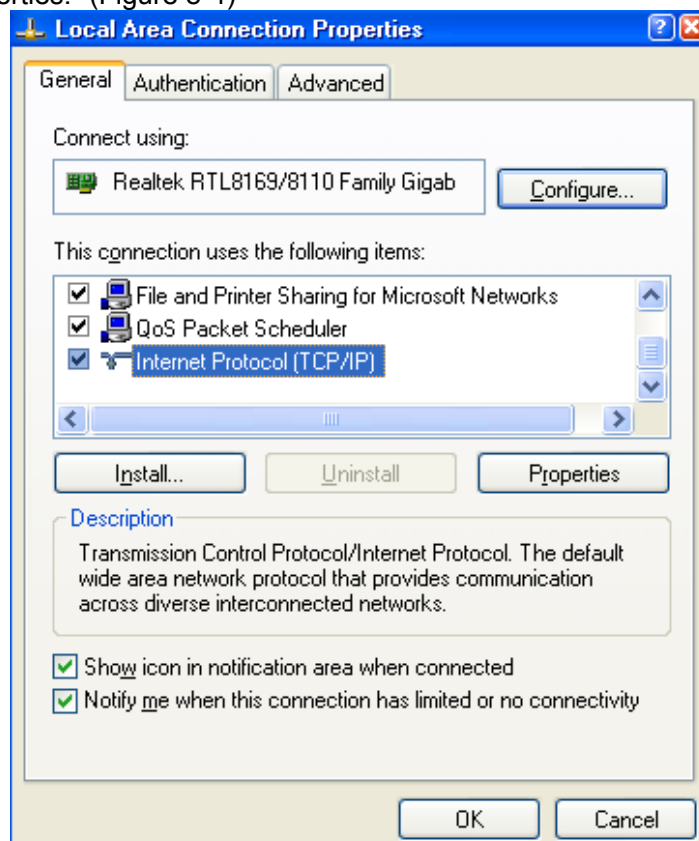


Figure 3-4

4. Double-click "Internet Protocol (TCP / IP)". (Figure 8-5)

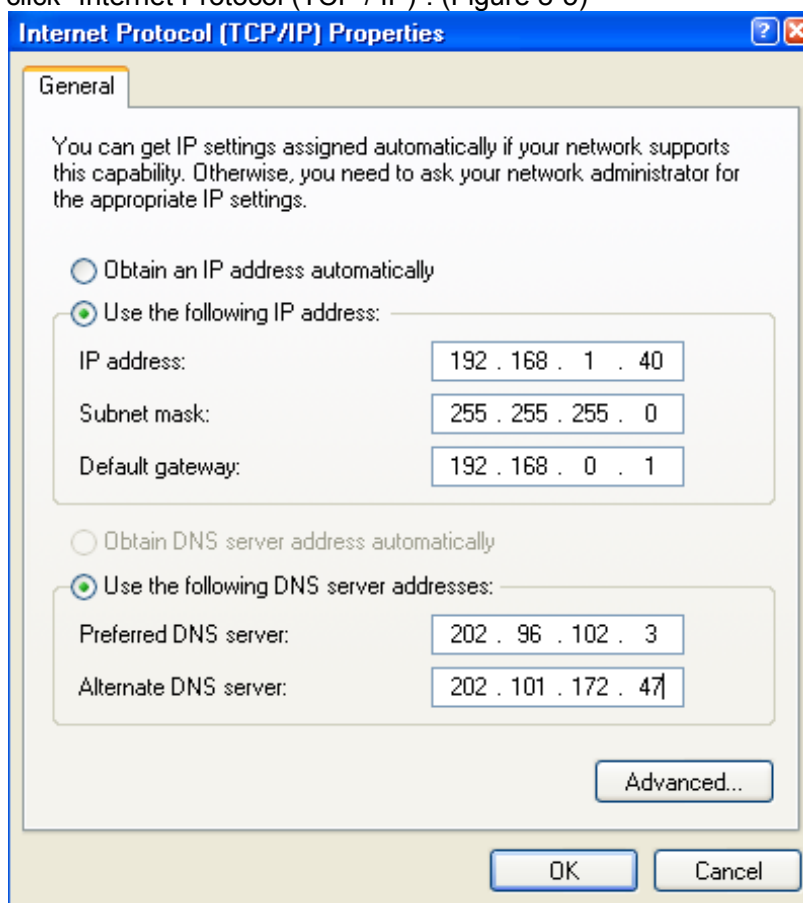


Figure3-5

5. See PC's IP address, subnet mask, default gateway. (Figure 8-5 in the parameters depending on the specific circumstances of different users)

6. DVR set up the corresponding IP address, subnet mask, and default gateway (see section 6.5 Network Settings). DVR which the subnet mask, default gateway and the PC the same as, IP address must be in the same network segment, but you can not have been used with the same IP address, or IP addresses will result in conflict. The above map for example, IP address should be: 192.168.0.X, in which X is not 40 or 1 (including the other is using the IP address), and can not be more than 255, the subnet mask is 255.255.255.0, gateway to 192.168.0.1.

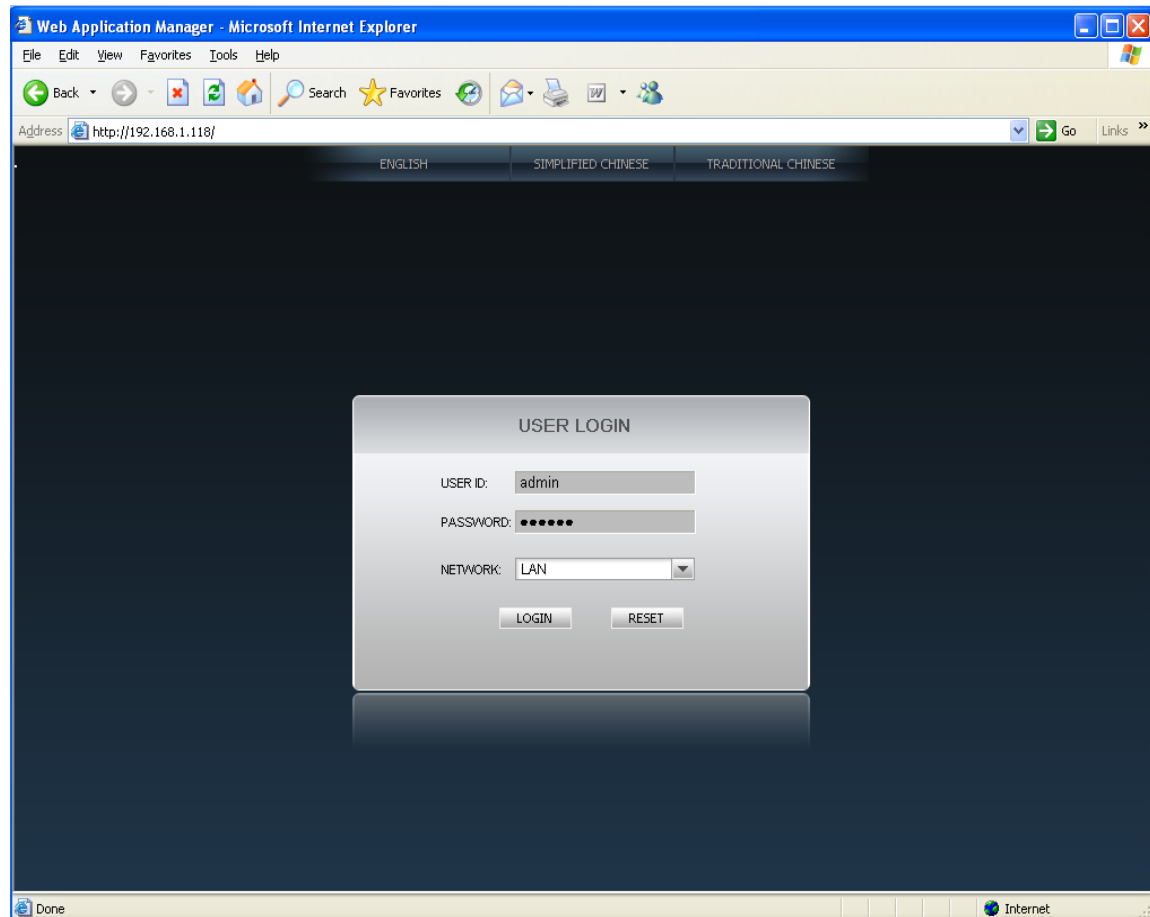
3.2. FEATURE

Through the IE browser of OS and install the software, you are able to do the network operation remotely, which is much more convenient. DVR support C/S, B/S, and visit in LAN and WAN, also support IP and domain name visiting.

Remark: Operating system Windows XP, Windows Vista and Browser IE6.0, IE7.0 is recommended

3.3. USER LOGIN

Input the DVR local IP in IE browser, when changed the port, you should add the port number after IP address, e.g. if DVR local IP is 192.168.1.118 (LAN) and the port is 8088, you should input http://192.168.1.118:8088. The default port is 8088, and directly input http://192.168.1.118 to access the login interface as following.



Select English interface in the top left side. Input username and password to enter into the system. The username and password is same as the ones set in DVR, Sign in IE must enter a user name and password to log in, the user name and password consistent with the DVR, the default administrator user: admin, the corresponding password is: 123456,

PASSWORD: Administrator has all authorities, operator has limited authorities who they can only watch, playback, please change the unit No. and default password is blank.


NETWORK: LAN/INTERNET(WAN)

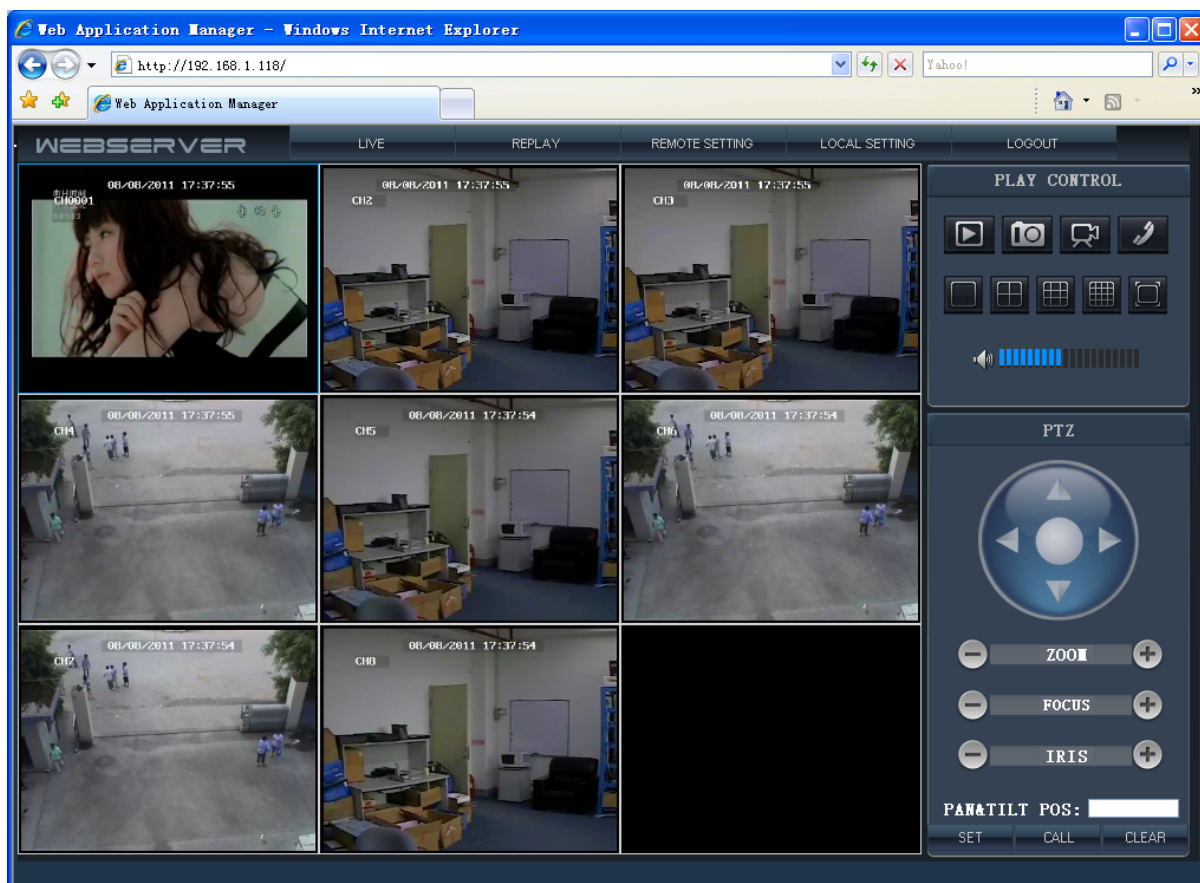
Remark: If you connect the device in WAN, the IP should be a public IP.

3.4. OPERATION INTERFACE

There are Live view, Playback and Setup options in the main interface, please press them to access it.

3.4.1. LIVE

Click  to enter into the interface as followings






3.4.1.1 PTZ CONTROL

Change the focus, preset aperture to control the PTZ.



Click to up/down/left/right control movement of the PTZ. When hold on the one direction key, the PTZ will keep circling as that direction after user press the stop key in the center of the wheel.

3.4.1.2 ZOOM

- Click  to zoom in and out.
- Click  to focus
- Click  to change the size of aperture

3.4.1.3 PTZ PRESET

PAN&TILT POS: Setup preset point.

You can control it via the below three buttons:



3.4.1.4 PLAY

Move cursor to the icons, it will highlighted when selected





Open all windows.



Capture picture, save in local disk, the default save path is C:/DVR



Quickly start all channels' recording video, here the left up corner of each channel have

normal recording video symbol **【R】**, click icon to switch between single screen /quad /nine



/16 split



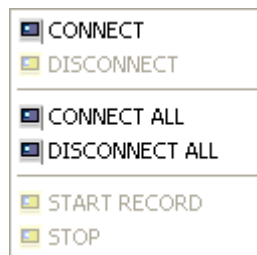
/ full screen



Volume adjust button

3.4.1.5 OTHER OPERATION

1. Select one channel at preview screen (the selected channel's frame will be change to RED), double click left key, enter to the selected channel single screen display.
2. Click one Chanel via left key at preview screen, then click right key, will occur window shortcut Menu, see below picture



You can open, shut down and start this channel's record via shortcut menu.

3. Click right key at one live view screen, click "open all windows" or "close all windows", will quickly open/close all windows.

3.4.2. REPALY(IE Browser)

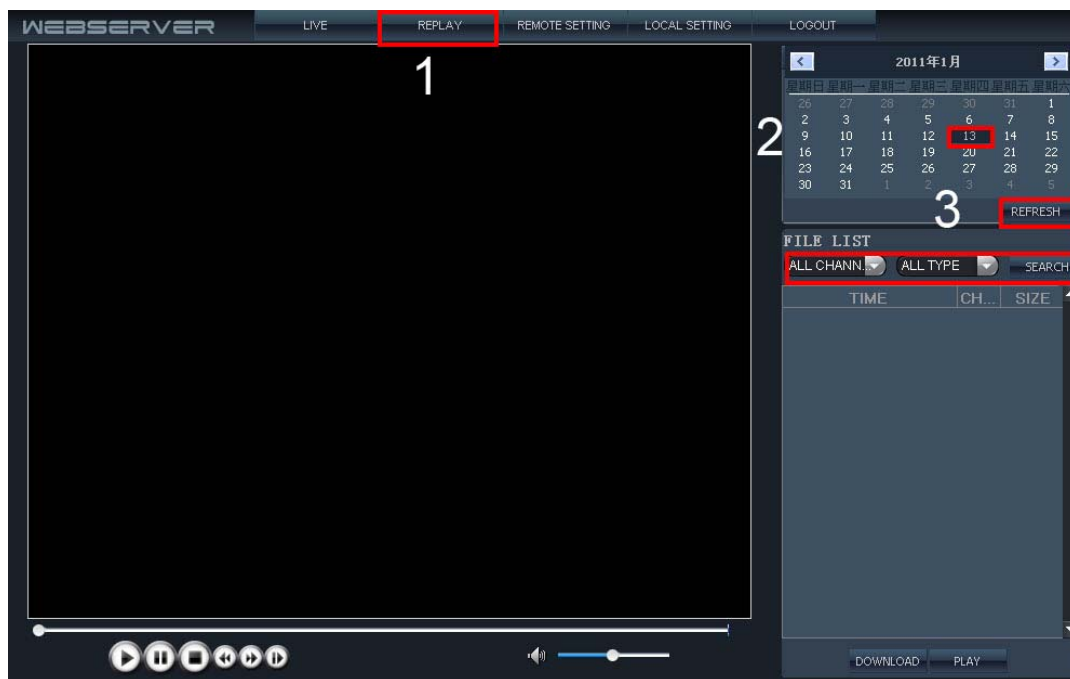
Step 1. Click "Replay" option.

Step 2. Click the date which you would like to playback.

Step 3. Also, you can click "**REFRESH**" button to search the video file again, or use file list to

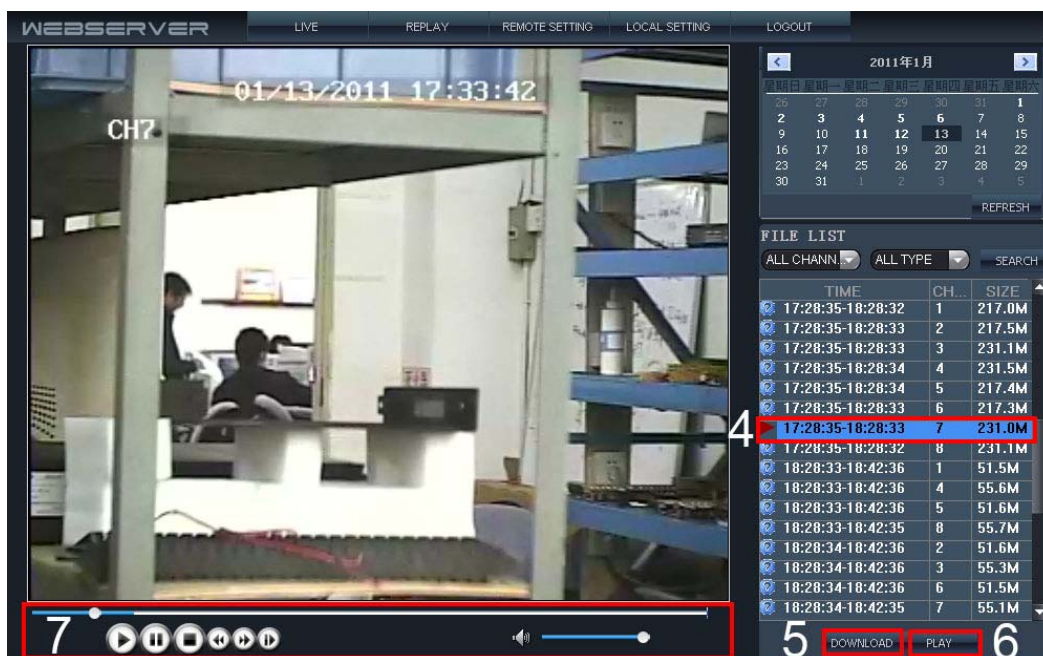
choose which channel you would like to playback, and then click on "**SEARCH**" button.

*The video file list will be displayed.



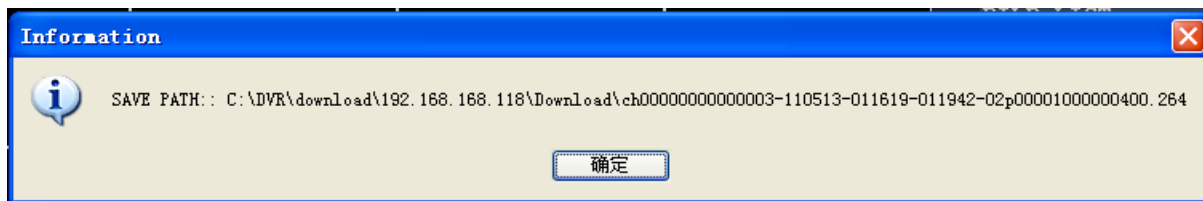
Step 4. Click specified video file which you would like to playback, remotely.

The video will be displayed. When the video file is playing, the system won't allow you to download video files.



Step 5. Close the playing video and then click **DOWNLOAD** button to download video file.

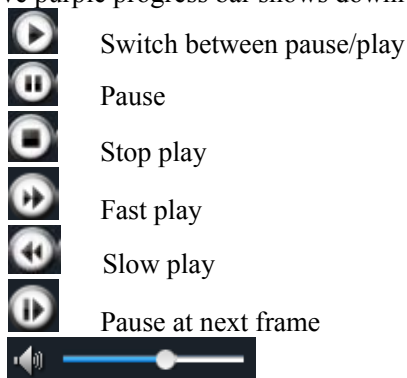
Step 6. When the video file was downloaded, the dialogue box will display.



Step 7. Playback control



The above purple progress bar shows download progress, green progress bar shows playback progress

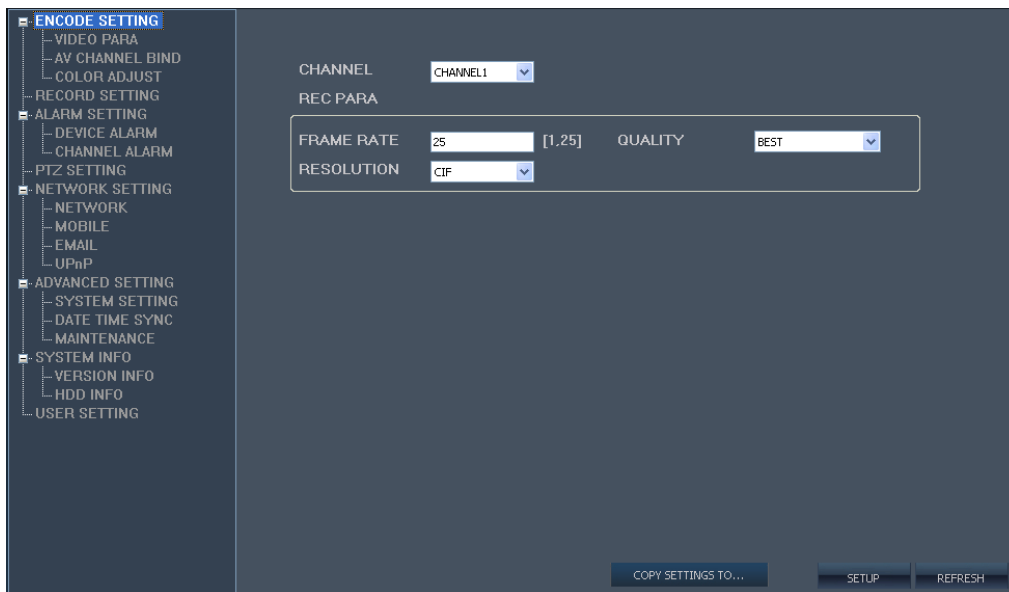


3.4.3. REMOTE SETTING

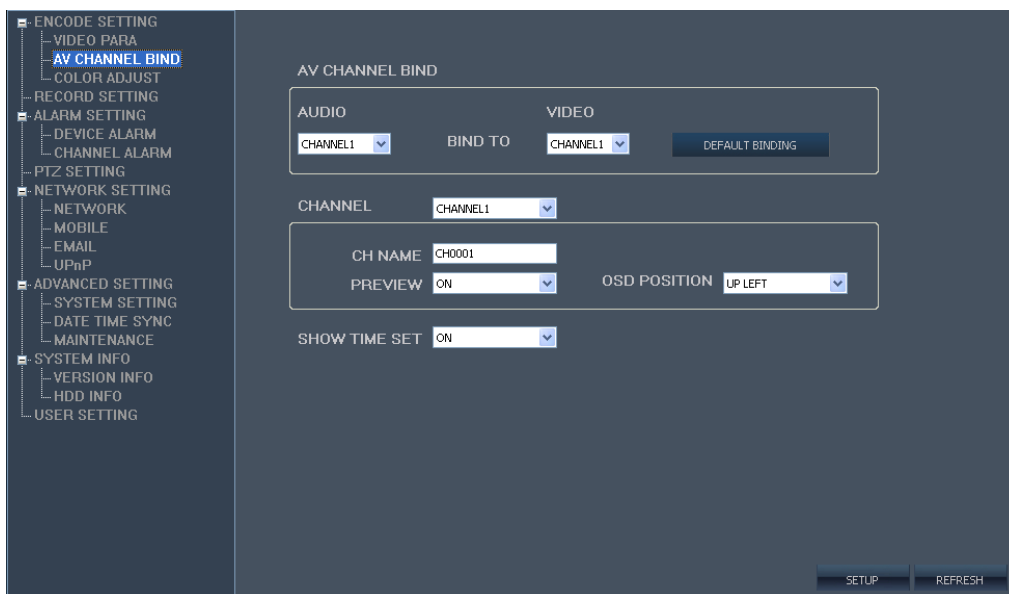
Click **REMOTE SETTING** to enter into setup interface, this interface include Encode setting, Record setting, Alarm setting, PTZ setting, Network setting, Advanced setting and system information seven menus.

3.4.3.1 ENCODE SETTING

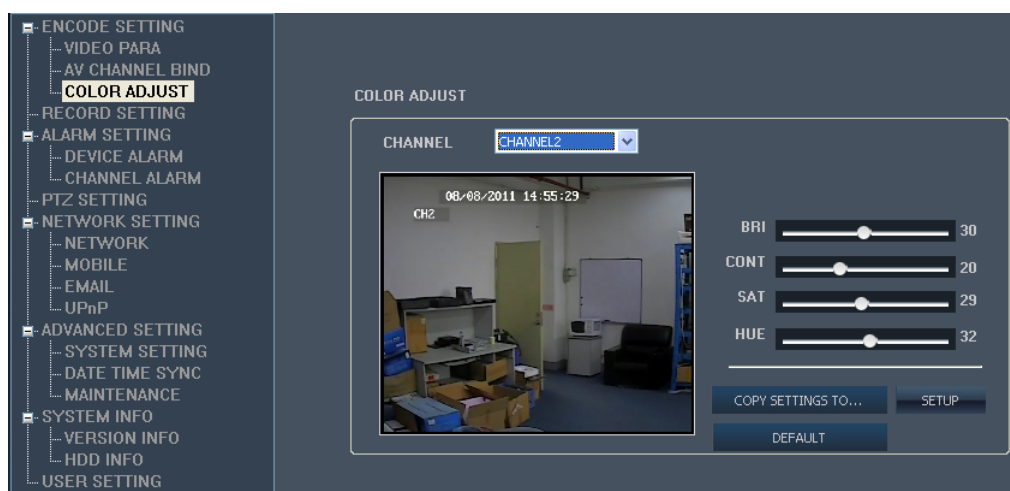
Click **ENCODE SETTING** to enter into setup interface; you can check the parameter settings as in GUI of DVR.



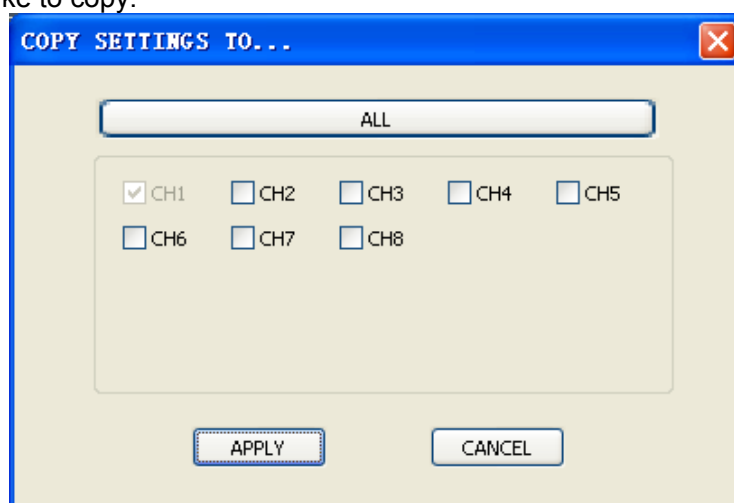
Click **AV CHANNEL BIND** to enter into setup interface; you can check the parameter settings as in GUI of DVR.



Click **COLOR ADJUST** to enter into setup interface; you can check the parameter settings as in GUI of DVR.

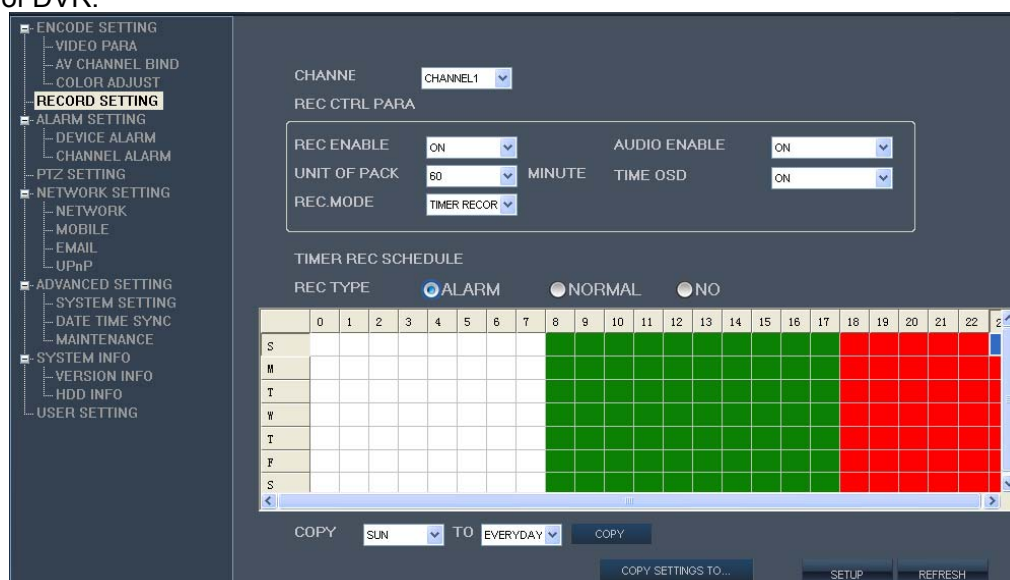


when you see " **COPY SETTINGS TO...** " button, you can copy the setting to the channel which you would like to copy.



3.4.3.2 RECORD SETTING

Click **RECORD SETTING** to enter into setup interface; you can check the parameter settings as in GUI of DVR.



3.4.3.3 ALARM

Click **ALARM SETTING** and **DEVICE ALARM** to enter into setup interface; you can check the parameter settings as in GUI of DVR.

The screenshot shows a dark-themed GUI for the 'DEVICE ALARM' settings. It contains two rows of settings, each with a label on the left and a dropdown menu on the right. The first row is labeled 'EVENT TYPE' and has a dropdown menu showing 'DISK INEFFECTIVE ALARM'. The second row is labeled 'ENABLE' and has a dropdown menu showing 'ON'.

EVENT TYPE	DISK INEFFECTIVE ALARM
ENABLE	ON

Click **CHANNEL ALARM** to enter into setup interface; you can check the parameter settings as in GUI of DVR.

The screenshot shows a dark-themed GUI for the 'CHANNEL ALARM' settings. On the left is a sidebar menu with various categories. The main area contains several settings. 'CHANNEL' is set to 'CHANNEL1'. 'EVENT TYPE' is set to 'I/O ALARM'. 'ENABLE' is set to 'NO'. 'MOTION' is set to 'MD AREA'. 'SENSITIVITY' has a slider bar. 'OUTPUT' is a section containing 'ALARM OUT TIME' (10 SECOND), 'BUZZER TIME' (0 SEC), 'POST REC' (60 SEC), and 'PRE REC TIME' (OFF SEC). There is a 'COPY SETTINGS TO...' button and 'SETUP' and 'REFRESH' buttons at the bottom right.

ENCORE SETTING
- VIDEO PARA
- AV CHANNEL BIND
- COLOR ADJUST
- RECORD SETTING
- ALARM SETTING
- DEVICE ALARM
- **CHANNEL ALARM**
- PTZ SETTING
- NETWORK SETTING
- NETWORK
- MOBILE
- EMAIL
- UPnP
- ADVANCED SETTING
- SYSTEM SETTING
- DATE TIME SYNC
- MAINTENANCE
- SYSTEM INFO
- VERSION INFO
- HDD INFO
- USER SETTING

CHANNEL	CHANNEL1
EVENT TYPE	I/O ALARM
ENABLE	NO
MOTION	MD AREA
SENSITIVITY	[Slider]
OUTPUT	
ALARM OUT TIME	10 SECOND
BUZZER TIME	0 SEC
POST REC	60 SEC
PRE REC TIME	OFF SEC

COPY SETTINGS TO...
SETUP REFRESH

3.4.3.4 PTZ

Click **PTZ SETTING** to enter into setup interface; you can check the parameter settings as in GUI of DVR.

CHANNE CHANNEL1

PTZ CONTROL

PROTOCOL	PELCO-D
ADDRESS	1
BAUD RATE	9600
DATA BIT	8
STOP BIT	1
VERIFY	NONE

COPY SETTINGS TO... SETUP REFRESH

3.4.3.5 NETWORK

Click **NETWORK SETTING** to enter into setup interface; you can check the parameter settings as in GUI of DVR.

BASIC ATTR

TYPE	STATIC	MAC	00-18-a8-43-29-4f
IP ADDRESS	192.168.1.118	NETMASK	255.255.255.0
PREFERRED DNS	192.168.1.1		
MEDIA PORT	8200	WEB PORT	80
GATEWAY	192.168.1.1		

PPPOE

PPPOE ENABLE	OFF		
USER NAME		PASSWORD	

DDNS

DDNS ENABLE	OFF	INTERVAL	45 min
SERVICE	3322	HOST NAME	
USER NAME		PASSWORD	

SETUP REFRESH

Click **MOBILE** to enter into setup interface; you can check the parameter settings as in GUI of DVR

MOBILE

PORT	15961
NETWORK TYPE	<div>WIFI</div> <div>2.5G</div> <div>2.75G</div> <div>3G</div> <div>WIFI</div>

Click **EMAIL** to enter into setup interface; you can check the parameter settings as in GUI of DVR

EMAIL ENABLE ☐ ON ☐ SEND INTERVAL 600 ☐ SECOND

SSL SWITCH ☐ OFF ☐

EMAIL SETTING

SMTP SERVER	smtp.yahoo.com	STMP PORT	0
SENDER	****sd@yahoo.com	PASSWORD	*****
ADDRESS 1	****oom@gmail.com		

SETUP REFRESH

Click **UPnP**, enter into [UPNP] settings interface as below:

☐ ENCODE SETTING
 VIDEO PARA
 AV CHANNEL BIND
 COLOR ADJUST
☐ RECORD SETTING
☐ ALARM SETTING
 DEVICE ALARM
 CHANNEL ALARM
 PTZ SETTING
☐ NETWORK SETTING
 NETWORK
 MOBILE
 EMAIL
UPnP
☐ ADVANCED SETTING
 SYSTEM SETTING
 DATE TIME SYNC
 MAINTENANCE
☐ SYSTEM INFO
 VERSION INFO
 HDD INFO
 USER SETTING

EnableUPnP ☒
 Working methods Automatic port ☐
 Card type LAN Card ☐
 Mapping Host
 Local Data Port 8200 Remote Data Port 8200
 Local Web Port 80 Remote Web Port 80
 Local Mobile Port 15961 Remote Mobile Port 15961
 SETUP REFRESH

After open UPNP, DVR IP will be automatically mapped to the router.(Note: It requires router supports this function and UPNP opened)

3.4.3.6 ADVANCED SETTING

Click **ADVANCED SETTING** and **SYSTEM SETTING** to enter into setup interface; you can check the parameter settings as in GUI of DVR.

SYSTEM SETTING

LANGUAGE: ENGLISH

TV MODE: PAL

TIME ZONE: GMT+08

DAYLIGHT SAVING TIME

DST: ON

DST MODE: CUSTOM

START: DEFAULT AM 2:00

1ST WEEK: 1ST WEEK

SUNDAY: JANUARY

00:00

END: DEFAULT AM 2:00

1ST WEEK: 1ST WEEK

SUNDAY: JANUARY

00:00

SETUP REFRESH

Click **ADVANCED SETTING** and **DATE TIME SYNC** to enter into setup interface; you can check the parameter settings as in GUI of DVR.

ENCODE SETTING

- VIDEO PARA
- AV CHANNEL BIND
- COLOR ADJUST

RECORD SETTING

ALARM SETTING

- DEVICE ALARM
- CHANNEL ALARM

PTZ SETTING

NETWORK SETTING

- NETWORK
- MOBILE
- EMAIL
- UPnP

ADVANCED SETTING

- SYSTEM SETTING
- DATE TIME SYNC**
- MAINTENANCE

SYSTEM INFO

- VERSION INFO
- HDD INFO
- USER SETTING

DATE TIME SYNC

DATE: 2011年 8月 8日

TIME: 14:59:47

SETUP

Click **MAINTENANCE** to enter into system information interface; you can check the parameter settings as in GUI of DVR.

SYS OPERATE

OPERATION

RESTORE FACTORY PARA
REBOOT
RESTORE FACTORY PARA

EXECUTE

UPGRADE

FILE

...

UPGRADE

AUTO MAINTENANCE

ENABLE

ON

MODE

EVERY DAY

TIME

00:00

SETUP

REFRESH

3.4.3.7 SYSTEM INFO

Click **SYSTEM INFO** to enter into system information interface (see below picture), this interface shows HDD status, remain record time, firmware version, and all the information is fixed.

ENCODE SETTING

VIDEO PARA

AV CHANNEL BIND

COLOR ADJUST

RECORD SETTING

ALARM SETTING

DEVICE ALARM

CHANNEL ALARM

PTZ SETTING

NETWORK SETTING

NETWORK

MOBILE

EMAIL

UPnP

ADVANCED SETTING

SYSTEM SETTING

DATE TIME SYNC

MAINTENANCE

SYSTEM INFO

VERSION INFO

HDD INFO

USER SETTING

VERSION INFO

DEVICE SN

1044

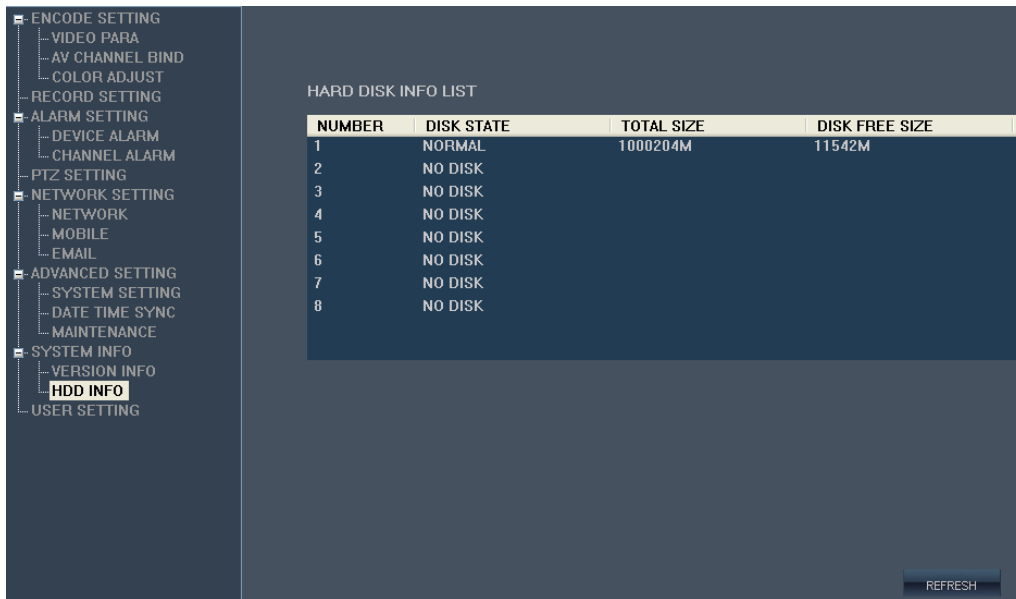
DEVICE TYPE

DMS8208

APP VERSION

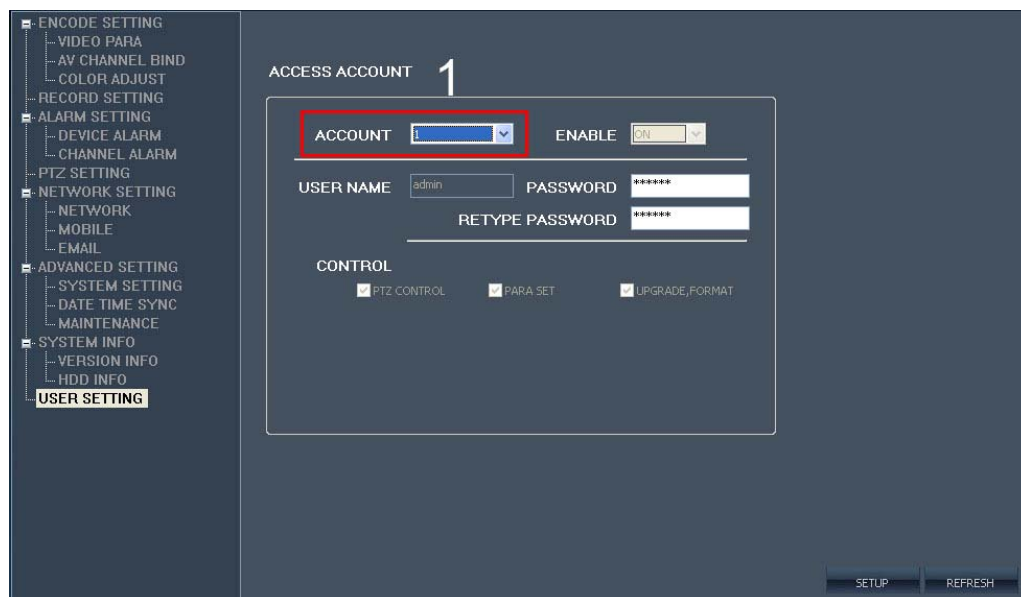
T110805

Click **HDD INFO** to enter into setup interface; you can check the parameter settings as in GUI of DVR



3.4.3.8 USER SETTING

Click **USER SETTING** to enter into system information interface, Only the administrator "admin" users can log in to add (to add up to four ordinary users), and only administrators can modify the normal user name and password corresponding to the ordinary user, each user name must be the corresponding password to log in and the corresponding operating authority, the default administrator user name: admin , password is 123456



New User (Max 5pcs)

Step 1. choose new user or change user and password

Step 2. Enable: ON

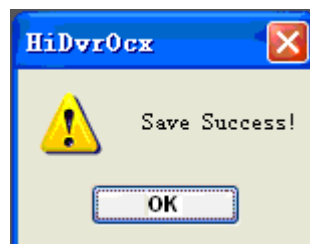
Step 3. Enter new user (can not use the same user)

Step 4. enter the password (must be 6 digitals)


Step 5: Set corresponding limits, PTZ CONTROL:control scanning; PARA SET: can change the technical parameter in far away place

Upgrade format: have upgraded and format HDD limit.

Step 5: Click "SETUP" button save added user.



3.4.4. LOCAL SETTING

Click  to enter into setup interface; you can check the parameter settings as in GUI of DVR

FILE SAVE PATH: capture picture and recording video save path

3.4.5. LOGOUT

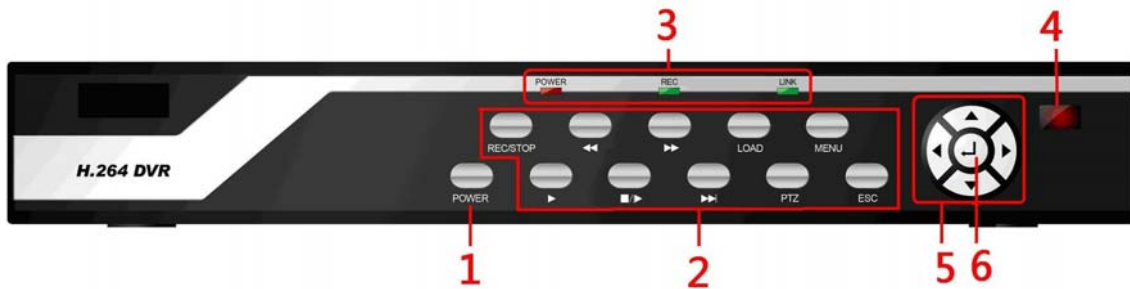
Click  Switch to login screen.

4. DVR INSTALLATION

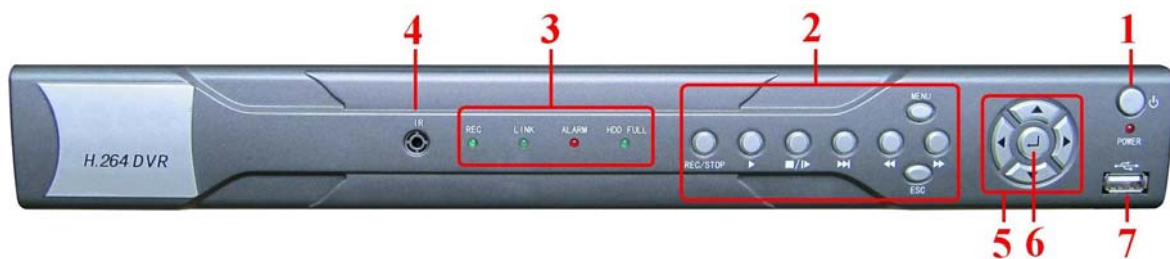
4.1. PRODUCT OVERVIEW

4.1.1. The Definition of Buttons and Connectors on Front Panel

4.1.1.1. #07 housing (Normally for 4CHs and 8CHs)







4.1.1.2. #15 and #22 housing (Normally for 16CHs)



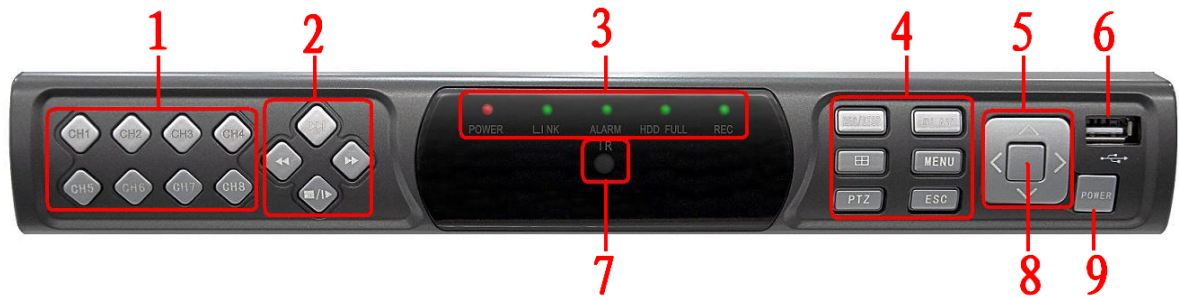
4.1.1.3. #04 housing (Normally for 16CHs DVR, or DVR with DVD-RW)



Buttons on Front Panel

NO.	TYPE	NAME	Instruction
1	Power	POWER	Shutdown system
2	Function keys Menu	REC/STOP	Recording control buttons
		◀◀ ▶▶	Fast forward/backward playback
		LOAD	Users Logout
		▶	Playback/play
		■/▶	Playback/play by frame
		ESC	Exit
		▶▶	Slowly playback
		PTZ	PTZ Controller
		MENU	Main menu
3	Status indicator	POWER	Power
		REC	Recording
		LINK	On means network has connected
		HDD FULL	Hard drive full of light
4	IR receiver	IR	Remote control receiver
5	Control button	Direction key	direction key include: up  、down  、left  、right  four buttons.
6	OK	Confirm operation	Enter

4.1.1.4. #20 housing face board and button introduction



NO.	TYPE	NAME	Instruction
1	CH1-CH8		Quick Select Channel
2	Playback buttons	▶▶	Slowly playback
		▶▶	Fast forward playback
		◀◀	Fast backward playback
		■/▶	Playback/play by frame
3	Status indicator	POWER	Power
		LINK	On means network has connected
		ALARM	Alarm
		HDD FULL	Hard drive full of light
		REC	Recording
4	Function keys	REC/STOP	Recording control buttons
		PLAY	Playback/play
		田	Multi-screen switching
		MENU	Main menu
		PTZ	PTZ Controller
		ESC	Exit
5	Control button	Direction key	direction key include: up 【▲】、down 【▼】、left 【◀】、right 【▶】 four buttons.
6	USB	USB	Mouse or storage device connected
7	IR receiver	IR	Remote control receiver
8	OK	Confirm operation	Enter
9	Power	POWER	Shutdown system

4.1.1.5. 3507 The Definition of Buttons and Connectors on Front Panel



Buttons on Front Panel

NO.	TYPE	NAME	Instruction
1	Power	POWER	Shutdown system
2	Function keys Menu	MENU	Main menu
		REC/STOP	Recording control buttons
		◀◀ ▶▶	Fast forward/backward playback
		▶	Playback/play
		■/▶	Playback/play by frame
		▶▶	Slowly playback
		PTZ	PTZ Controller
3	Status indicator	ESC	Exit
		POWER	Power
		REC	Recording
		LINK	On means network has connected
		ALARM	Alarm
4	IR receiver	HDD FULL	On means the HDD is full.
		IR	Remote control receiver
5	Control button	Direction key	direction key include: up 【▲】、down 【▼】、left 【◀】、right 【▶】 four buttons.
6	OK	Confirm operation	Enter
7	Lcd power	LCD POWER	LCD POWER

4.1.1.6. #16 housing face board introduction (Normally fit for 4CHs simply DVR)

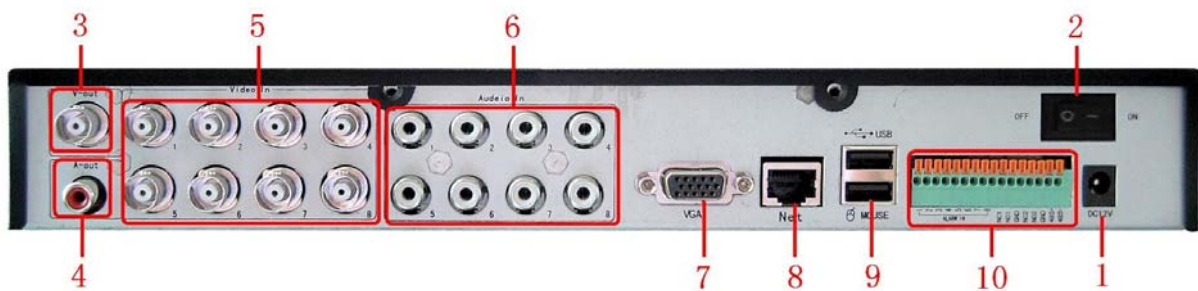


TYPE	NAME	Instruction
Status indicator	POWER	Power
	REC	Recording
	NET	On means network has connected
IR receiver	IR	Remote control receiver

4.1.2. The definition of buttons and connectors on fear panel

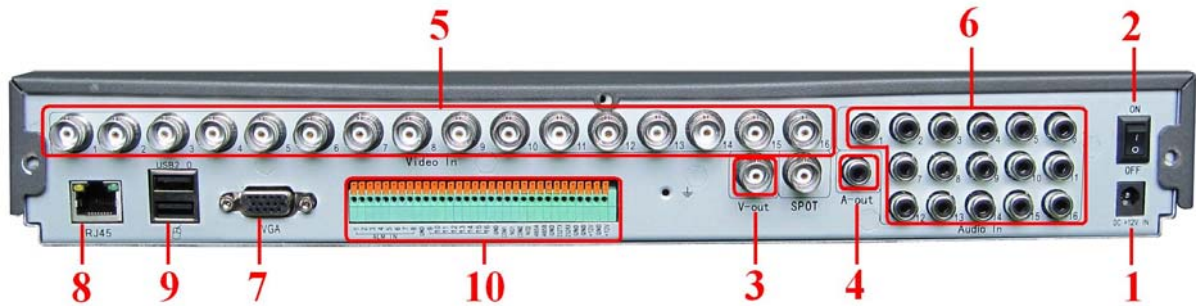
4.1.2.1. Generic 4CHs and 8CHs DVR back board interface definition

Generic 4CHs and 8CHs DVR back board fit for face board of #04, #07, #11, #15, #20, and #22 housing.



4.1.2.2. Generic 16CHs DVR back board interface definition

Generic 16CHs DVR back board fit for face board of #04 and #15 housing.



Connectors on Rear Panel

Item	Physical connector	Connector description
1	DC+12V IN	DC 12V/3.42A
2	ON/OFF	Power ON/OFF
3	V-out	One video output for connecting TV or monitor (BNC)
4	A-out	For connection audio output
5	Video In	For connecting analog video signal input (BNC)
6	Audio in	For connecting audio signal
7	VGA	For connecting VGA monitor
8	RJ45	For connecting Ethernet
9	USB2.0/MOUSE	USB2.0/USB mouse
10	ALARM IN	8 I/O alarm input
	COM NO GND	I/O output for alarm
	RS485+ RS485-	RS 485 for connecting PTZ

4.1.2.3. Simply 16CHs DVR back board interface introduction.

Simply 16CHs DVR back board fit for face board of #15, #19, #20 and #22 housing.

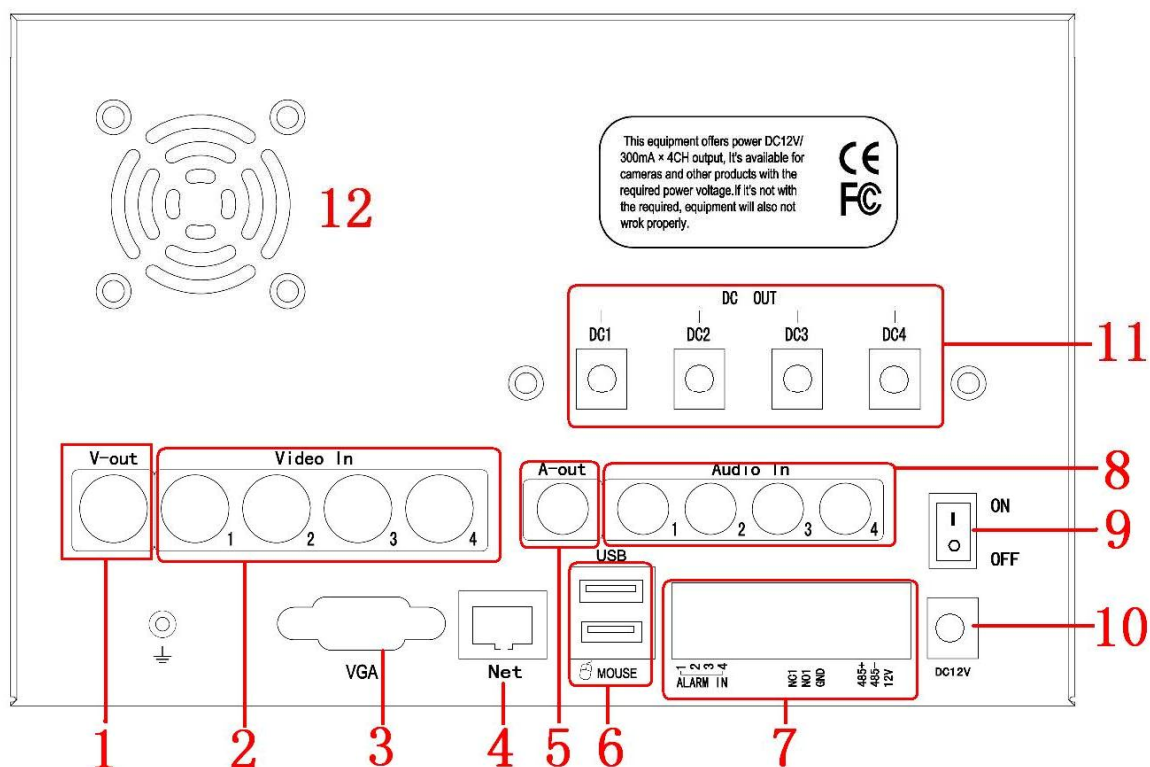


Connectors on Rear Panel

Item	Physical connector	Connector description
1	V-OUT	One video output for connecting TV or monitor (BNC)

2	Video In	For connecting analog video signal input (BNC)
3	DC12	DC 12V
4	ON/OFF	POWER ON/OFF
5	A-OUT	For connection audio output
6	Audio In (A-IN)	For connecting audio signal
7	VGA	For connecting VGA monitor
8	Net	For connecting Ethernet
9	USB	USB2.0/USB mouse
10	ALARM IN	8 I/O alarm input
	COM NO GND	I/O output for alarm
	RS485+ RS485-	RS 485 for connecting PTZ

4.1.2.4. 3507 back board interface definition (Normally fit for 4CHs Generic DVR and 4CHs simply DVR)



Connectors on Rear Panel

Item	Physical connector	Connector description
1	V-out	One video output for connecting TV or monitor (BNC)
2	Video In	For connecting analog video signal input (BNC)
3	VGA	For connecting VGA monitor
4	Net	For connecting Ethernet
5	A-out	For connection audio output
6	USB/MOUSE	USB2.0/USB mouse
7	ALARM IN	4 I/O alarm input
	COM NO GND	I/O output for alarm
	RS485+ RS485-	RS 485 for connecting PTZ
8	+12V	For connecting audio signal
9	Audio In	Power On/Off
10	ON/OFF	DC 12V
11	DC12V	4 DC out
12	FAN	cooling fan

4.1.2.5. Simply 4CHs and 8CHs DVR back board interface definition

Simply 4CHs and 8CHs DVR back board fit for face board of #07, #16, #20 and #22 housing.



Figure 5-10 Simply 4CHs DVR back board



Figure 5-11 Simply 8CHs DVR back board

Item	Physical connector	Connector description
1	VGA	For connecting VGA monitor
2	Video In (V-IN)	For connecting analog video signal input (BNC)
3	V-OUT	One video output for connecting TV or monitor (BNC)
4	A-OUT	For connection audio output
5	Audio In (A-IN)	For connecting audio signal
6	NET	For connecting Ethernet
7	USB/MOUSE	USB2.0/USB mouse
8	RS485+ RS485-	RS 485 for connecting PTZ
9	DC12	DC 12V
10	ON/OFF	Power On/Off

4.2. Alarm post interface

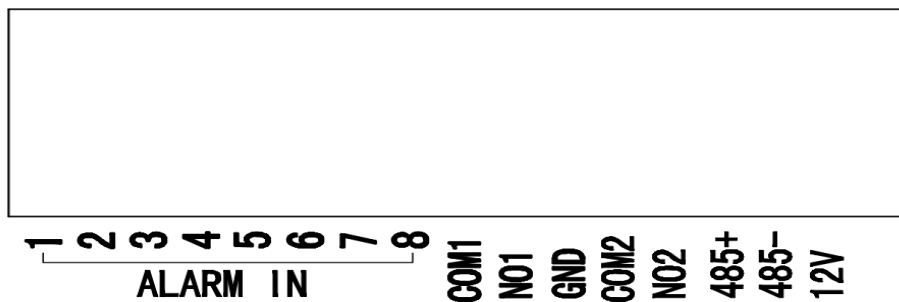
Connection method of alarm post: firstly strip the cable to be connected, then use a small screwdriver to jack up orange part, put the cable into the receptacle then loosen the screwdriver to fasten.

5.2.1 Alarm interface definition diagram

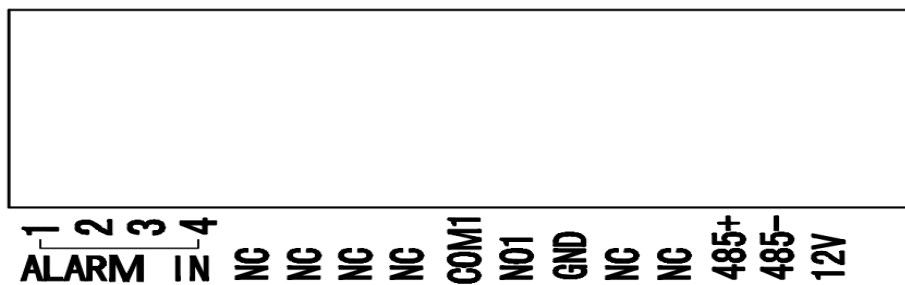
General 16CHs(Alarm input,Alarm output,RS232 interface,RS485 interface)



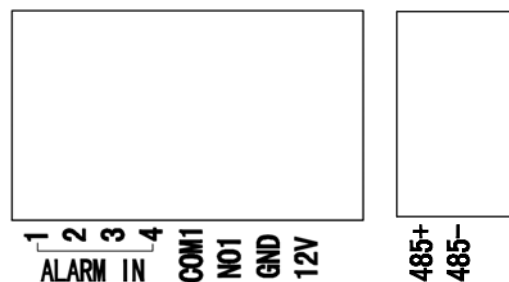
General 8CHs and Simple version 16CHs (Alarm input , Alarm output , RS485 interface)



General 4CHs (Alarm input , Alarm output , RS485 interface)

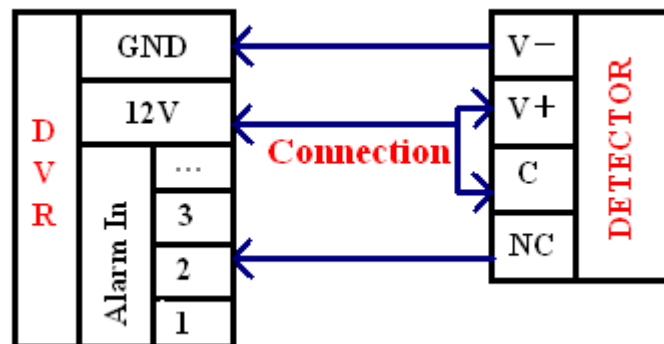


Simple 4CHs and 8CHs (Optional) (Alarm input , Alarm output , RS485 interface)

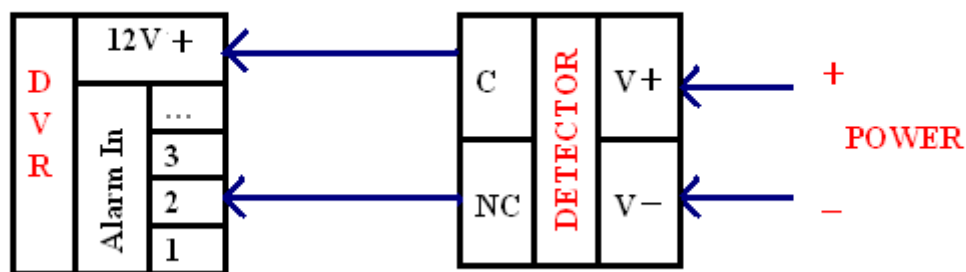


4.2.1. Alarm Input and Output

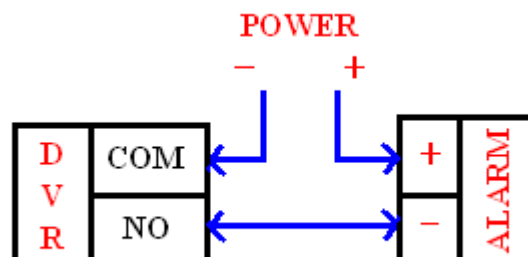
There are 8 sets alarm input connector and 1 set output for this DVR. Alarm input is for connection IR annunciator, fog sensor. The connection diagram of DC alarm input as following:



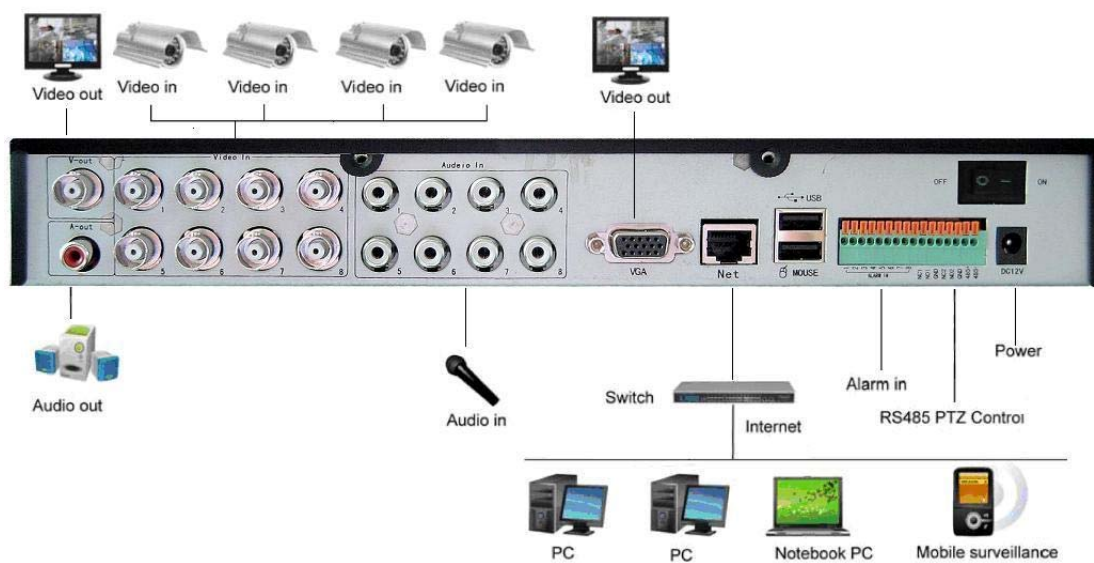
Connection diagram of AC alarm input as following:



The connection diagram of alarm output as following:



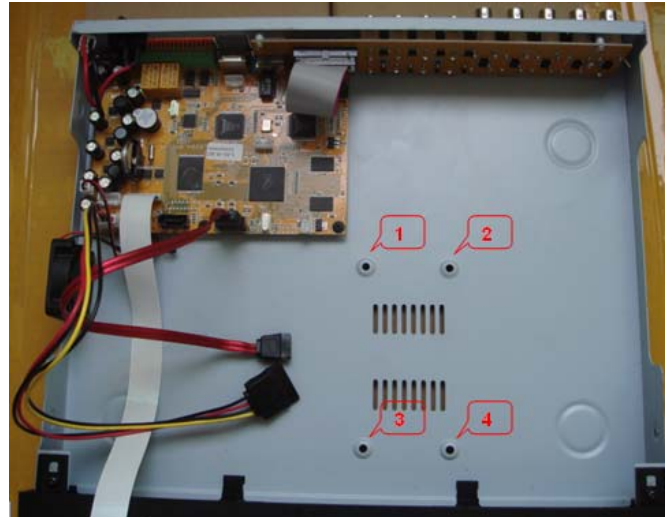
4.2.2. System Network Diagram



4.3. HDD INSTALLATION

Please installation the HDD as the following steps:

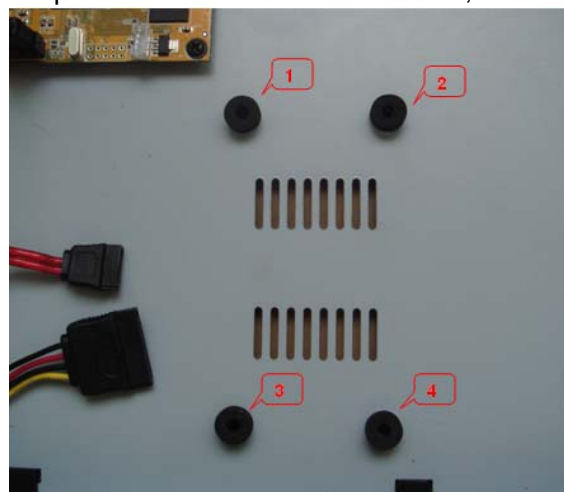
1) Open the machine, there are 4 screw holes used to fix the HDD as below;



2) Take out the fixed screws and cotton pads used to protect HDD; As below picture;



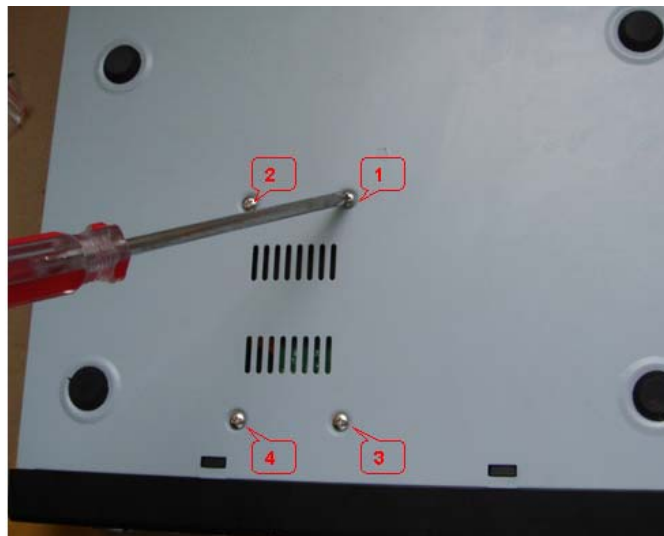
3) Tear the cotton pads and post in the screw holes as shown;



-
- 4) Put the circuit side of HDD on the board, and make the screw holes correspond to the cotton pads;



- 5) Fix the HDD from the bottom; Make sure screws had gotten through the cotton pads, as below picture;



Notice: Newly installed HDD should format before recording

5. FAQ

If your problem is not listed below, please call our toll-free number for more support.

1. Question: DVR is not working after starting?

Answer:

- ✧ Check the adaptor input
- ✧ Check the on-off power line, is it well-connected?
- ✧ Check the power on-off
- ✧ Check the upgrade procedure
- ✧ Check the main board of DVR

2. Question: DVR is rebooting automatically or stopped after starting the DVR for several minutes?

Answer:

- ✧ Instability or low input voltage
- ✧ Bad track hard drive or the line of hard drive is bad
- ✧ On-off power supply is not enough
- ✧ The front-end video signal instability
- ✧ High temperature, too much dust, too bad the DVR operating environment
- ✧ The main board is not well-connected with other boards
- ✧ The hardware of DVR is defective

3. Question: No output of single channel, multi channel or all channel video?

Answer:

- ✧ Please check the adaptor of camera whether to see if it is well-connected
- ✧ Please check the cable for connecting video input/output in the back panel of DVR
- ✧ Please insert the video source directly into the display device and check If they are causing the problem.
- ✧ Check the brightness of the picture and bring it back to its original default setting
- ✧ No video input signal or too weak
- ✧ Display settings in the preview set to be closed
- ✧ The hardware of DVR is defective

4. Question: DVR cannot record after startup and the interface is showing "H"

Answer:

- ✧ Make sure power adaptor is DC 12V
- ✧ Make sure HDD is formatted
- ✧ Check the power and data connection cables of the HDD
- ✧ The HDD is defective
- ✧ The SATA port is not working

5. Question: What is meaning of "R" "M" "I" "H" showed in interface?

Answer:

- ✧ "R" means the channel is recording
- ✧ "M" means the channel is on motion detection
- ✧ "I" means the channel is on alarm
- ✧ "H" means there is either no HDD. the HDD is bad or the HDD is full

6. Question: DVR is having problem with real-time images, such as bad image color or serious brightness distortion

Answer:

- ✧ If PAL and NTSC is not correctly selected on the BNC output, the images will be in black and white
- ✧ DVR is not compatible with monitor
- ✧ The video transmission distance is too far
- ✧ The setting of DVR color, brightness and so on are wrong

7. Question: No audio sound when monitoring?

Answer:

- ✧ Check sound box or speaker functions. Also check possible short circuit.
- ✧ Audio source may be connected to the video channel. You can click to full-screen to check.

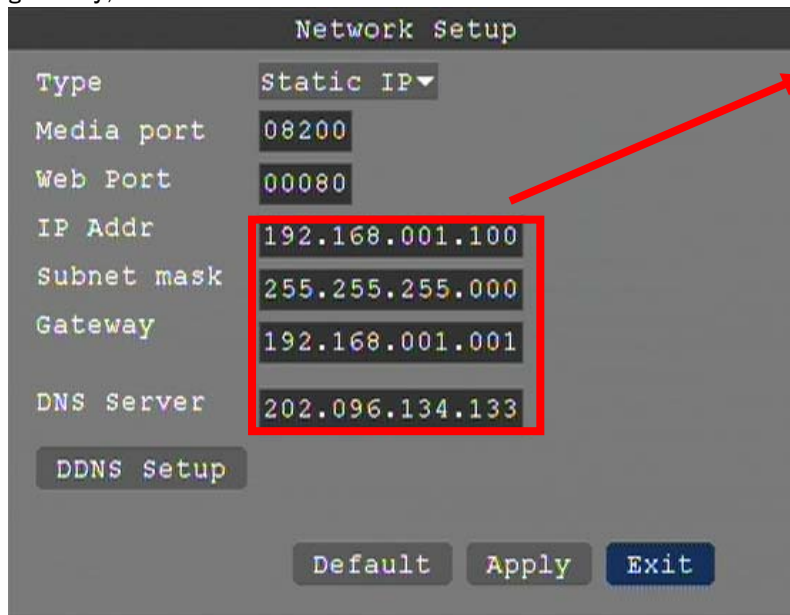
-
- ✧ The hardware of DVR is defective
- 8. Question: No audio sound when playing back?**
Answer:
✧ Setting problem: open audio-video item
✧ Check the audio to see if it is closed in playback interface
- 9. Question: System time is not correct?**
Answer:
✧ Wrong setting or user did not click "Edit" to confirm
✧ Battery is not connected properly
✧ Battery is dead. Please change.
- 10. Question: Why the "Stop recording" by the right mouse button does not work, how to stop recording?**
Answer:
✧ The "Stop recording" by the right mouse button is only suitable for Manual recording. It can't stop recording when it's in "start recording" or the video in video plan.
✧ If you want to stop recording, please set the time is not recording.
- 11. Question: "Stop recording" function by the right mouse button does not work. How to stop recording?**
Answer:
The "Stop recording" by the right mouse button is for Manual Recording only. It can not stop recording when it is in "start recording" or the video is in video plan. If you want to stop recording, please set the time to not recording.
- 12. Question: Motion detection is not working?**
Answer:
✧ The setting of motion detection area is not correct
✧ Sensitivity is too low
- 13. Question: CD-writer /USB backup error**
Answer:
✧ The data exceeds the capacity of backup device
✧ The backup device is incompatible
✧ The backup device is damaged
- 14. Question: Remote control cannot work?**
Answer:
✧ The address of remote control is not correct
✧ The distance of remote control is too far or the angle is too biased
✧ Remote control batteries run out
✧ Remote control is damaged or the front panel of DVR is damaged
- 15. Question: WEB cannot login?**
Answer:
✧ Please check the network to see if it is connected. Check if LINK or 100M LED is displayed normally on the panel; use ping xxx.xxx.xxx.xxx (DVR IP) to check if the Internet is linked properly.
✧ Recommended to use Windows XP or Vista operating system, also use IE6.0 browser or IE7.0 browser
✧ ActiveX control has been blocked. Please manually install ActiveX control again.
✧ Please install DX8.1 and upgrade your video card driver
- 16. Question: There is no picture or picture is not clear when you preview the recording or playback the recording via IE**
Answer:
✧ If you access DVR by IE, please choose "Wan" in "web environment"
✧ Please try "Close windows" by the right mouse button, and try "Open windows" again
- 17. Question: It displays "other members are setting....." while setting DVR by IE**
Answer:
✧ It probably means someone else is setting the DVR. Please check the DVR configuration interface or exit DVR.

6. APPENDIX

Appendix 1 Nvrddns use manual

一、 Domain name applications:

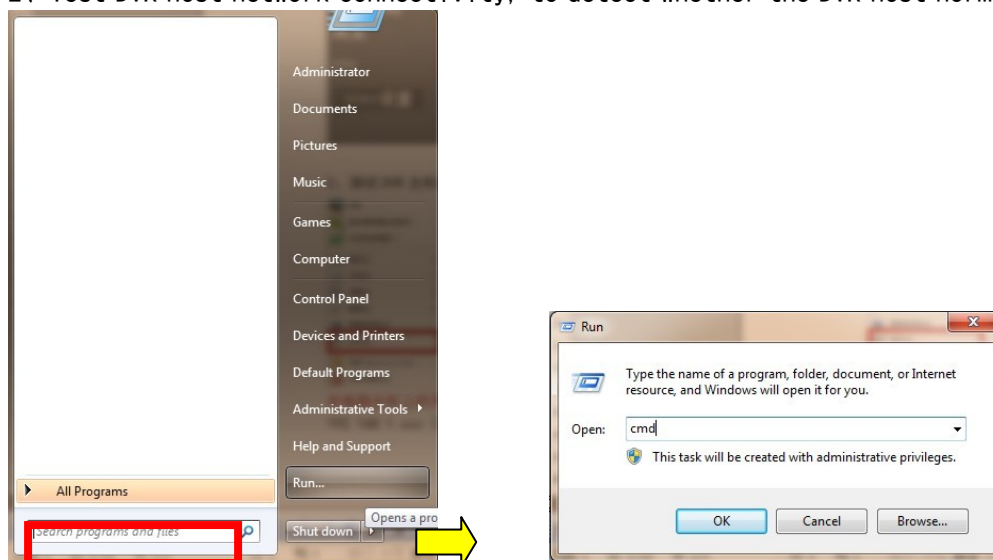
1、 In the domain name applications before, first set DVR host's IP address, subnet mask, gateway, DNS



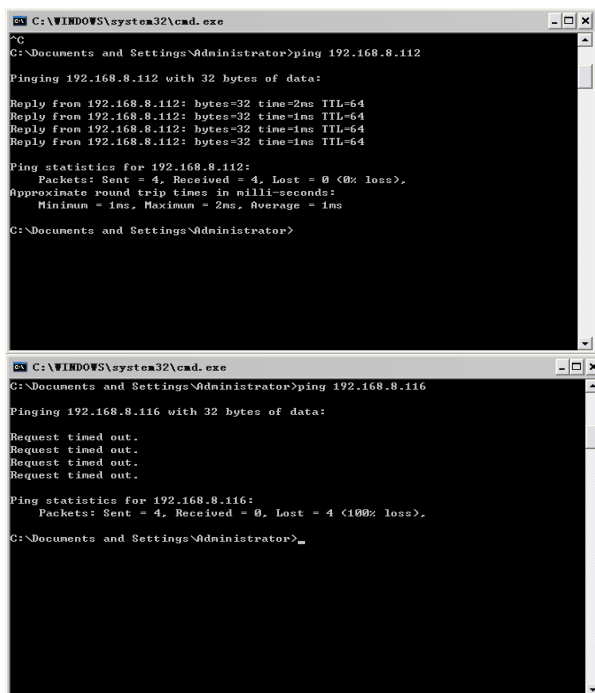
Explanation:

Set the IP address, gateway, DNS, all must and local network Settings as. For example: local gateway for 192.168.1.1, DNS: 202.96.134.133, then the gateway and DNS DVR must be the same. IP address to the rest of the network can't set computer or network

2、 Test DVR host network connectivity, to detect whether the DVR host normal communication



In computer host start menu-run inside, in input CMD ping command input. For example: ping 192.168.1. XXX (this IP for the DVR set IP address)

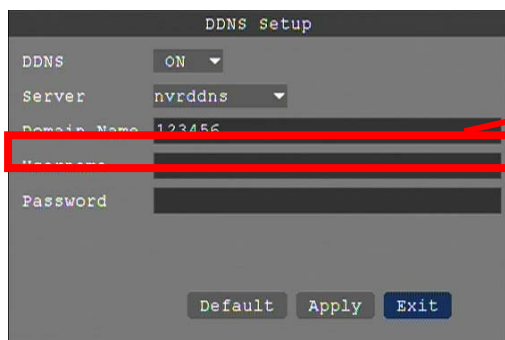
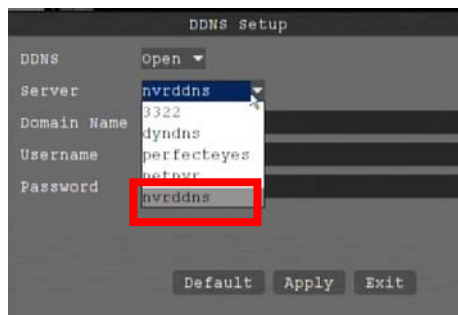
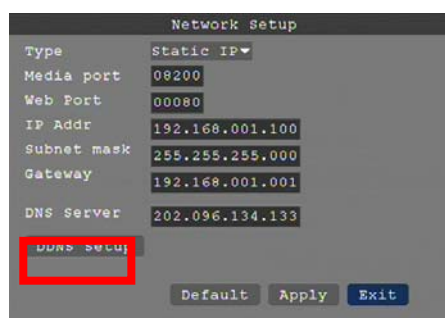
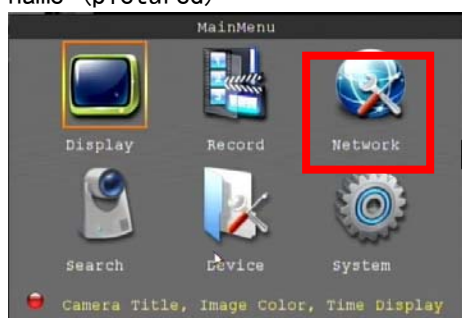


As shown in figure:
appear figure shown
on character, says
NVR has normal

As shown in figure:
appear figure shown on
Request timed out,
says characters DVR
network connectivity
is not normal, please

In the DVR host directly apply for domain name:

The main menu→ network Settings→ DDNS Settings→ > choose NVRDDNS enable domain name-(pictured)

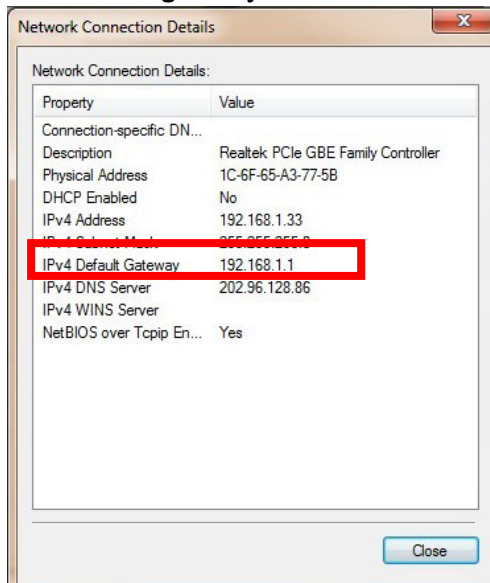


In the domain name for the domain name can apply for input, domain name can be Numbers, English and other components, such as: input, the domain name for 123456:123456. NVRDDNS.net. After the completion of the input, click ok in launch

二、Mapping DVR host port: (in a TP-LINK router as an example, introduces the other routers please reference router instruction)

1, open the router will DVR host 8200, 80, 15961 (mobile phone access ports, do not need to mobile phone access, no mapping) open to network.

First check router IP address, open the computer connection status view gateway, local that gateway = router IP address



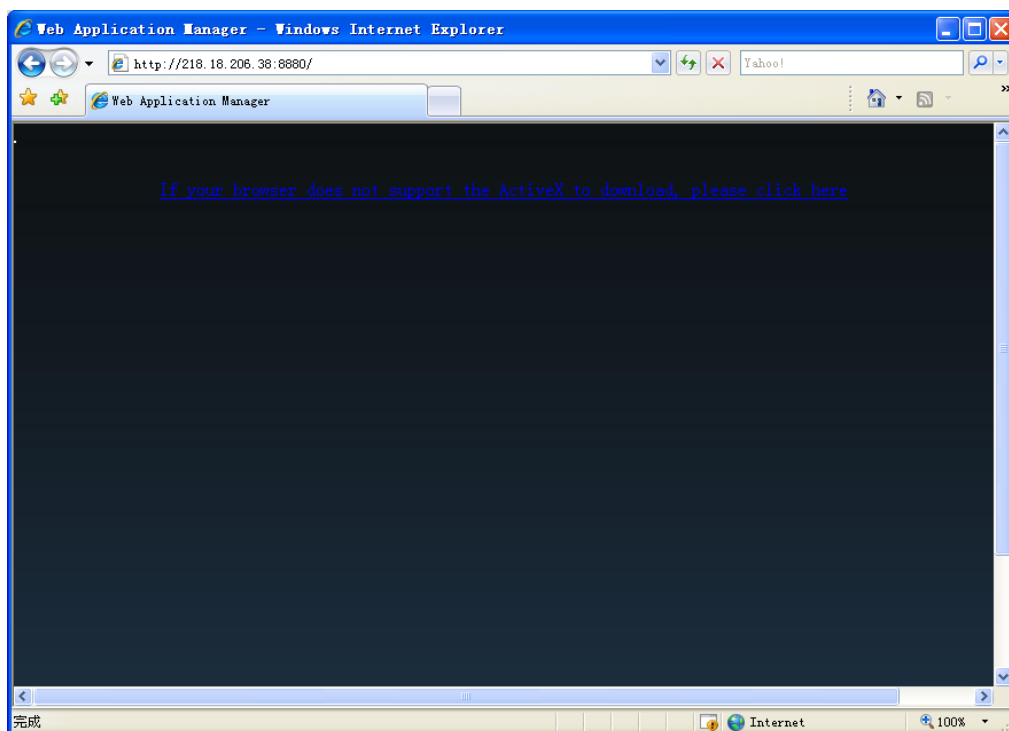
Open the IE browser input router IP address



Open the router to find: forwarding rules-virtual server-adding new items, will be 8200, 80, set the corresponding IP mapping , After setting the domain name can be accessed with.
3, network access (IE and client)

IE browser visit:

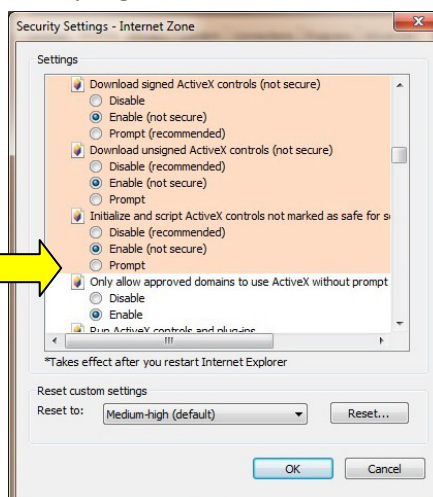
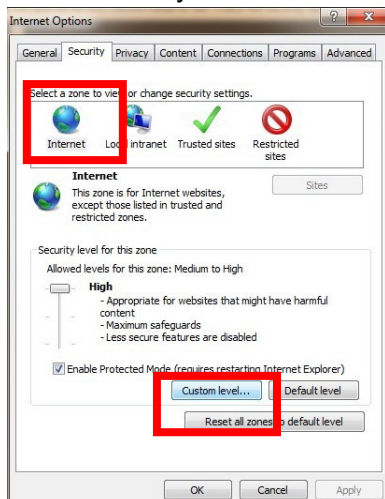
First open IE browser address bar in the application of success in input domain name:
<http://123456.nvrddns.net>



IE browser visit:

First open IE browser address bar in the application of success in input domain name:
http://123456.nvrddns.net

The first open web will pop up a sign not confirm tip box, this time control, please click "installation" or "is" button to determine the installation. If or not installed plugin, please click the following operations: in the client computer opens up a window, IE selection tools-Internet options-security-custom ActiveX control level, and to enable all elected and plug-ins, complete set determined after exit. Then refresh website, can be automatically download and install the plugin.



After the completion of the plugin installation will be automatically popup land casing: enter your user name: admin password: 123456 (default) choose network environment (LAN or WAN)

USER LOGIN


LANGUAGE: ENGLISH

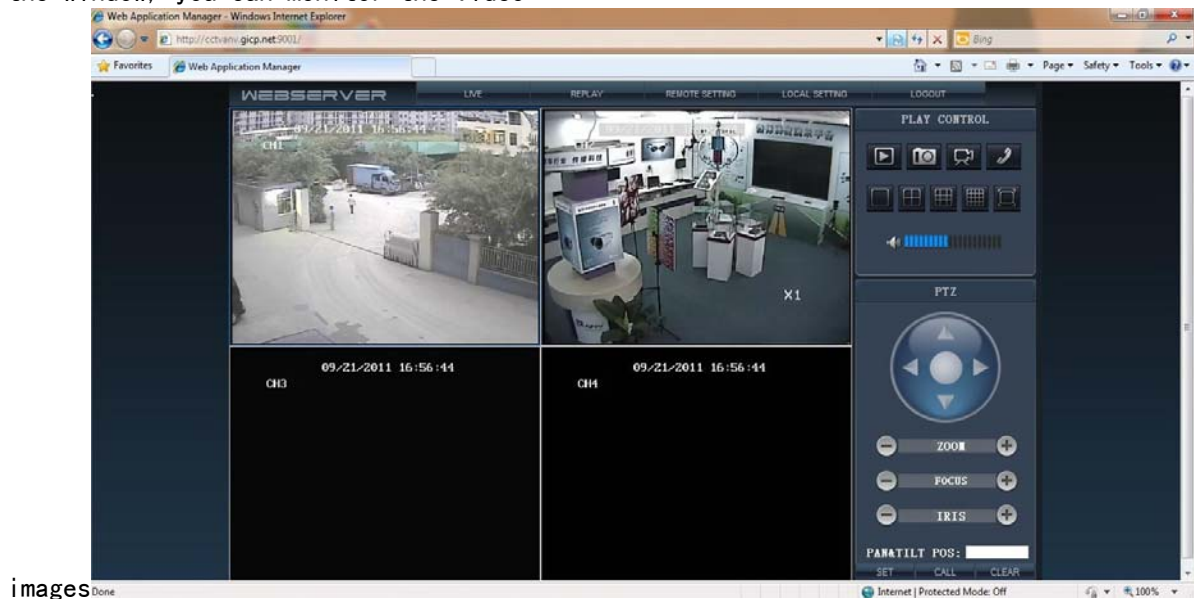
USER ID:

PASSWORD:

NETWORK: LAN


LOGIN
RESET

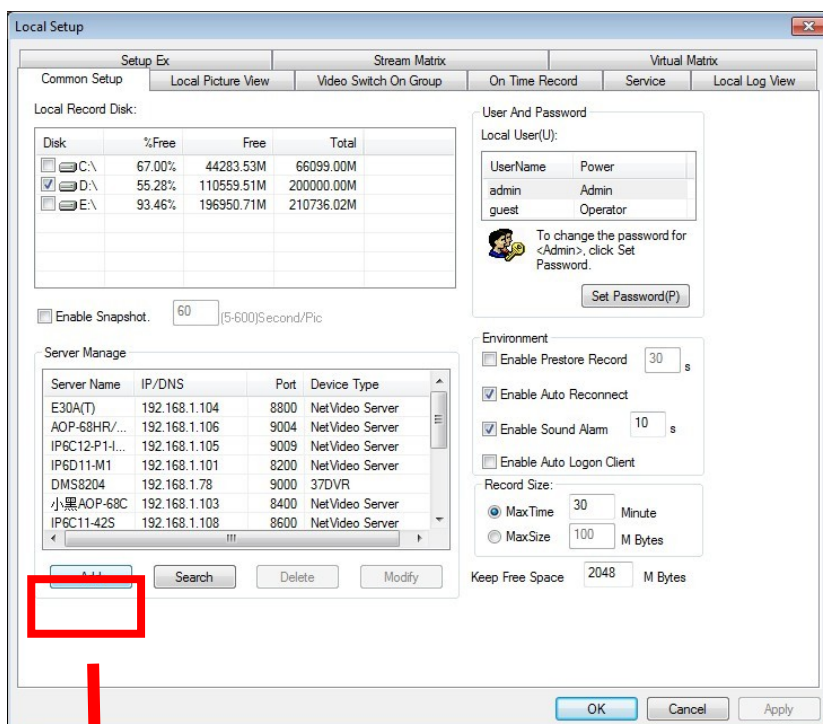
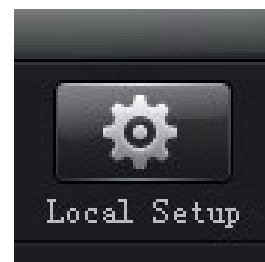
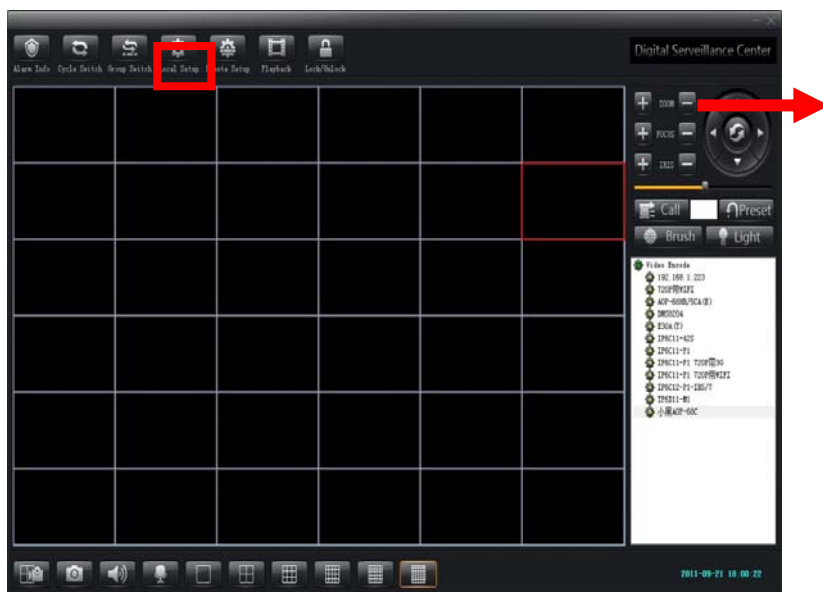
When finished, click on the login screen to enter IE, click on the icon  to open the window, you can monitor the video



2、The client visit:

The remote computer first installed on the client software, after installation, double

click into  to the client the main menu-> Settings-> general local Settings-> add server (choose good hosting type, set up IP address, name, port, etc.), as shown in the diagram



Modify Server

Server: 37DVR
 Address: 123456.nvrddns.net ☒ NVRDDNS
 Local Name: dvr
 Remote Name:
 CMD Port: 8200 Stream type: LAN
 Remark:
 Group: Video Encode Group Set
 Information:
☐ Enable Auto Logon
 Channel Num: 4
 User Name: Password:
☐ View Video By RTSP
 Channel: Channel1
 RTSP link:
 Ok Cancel

Select hosting type: according to the corresponding host machine type selection type (such as machine model 3704 FC choose corresponding 37 DVR)

Address: fill in the application domain name, do not need to add http:// and port

Name: as input

Add good server, return to the main interface, and then login server can.

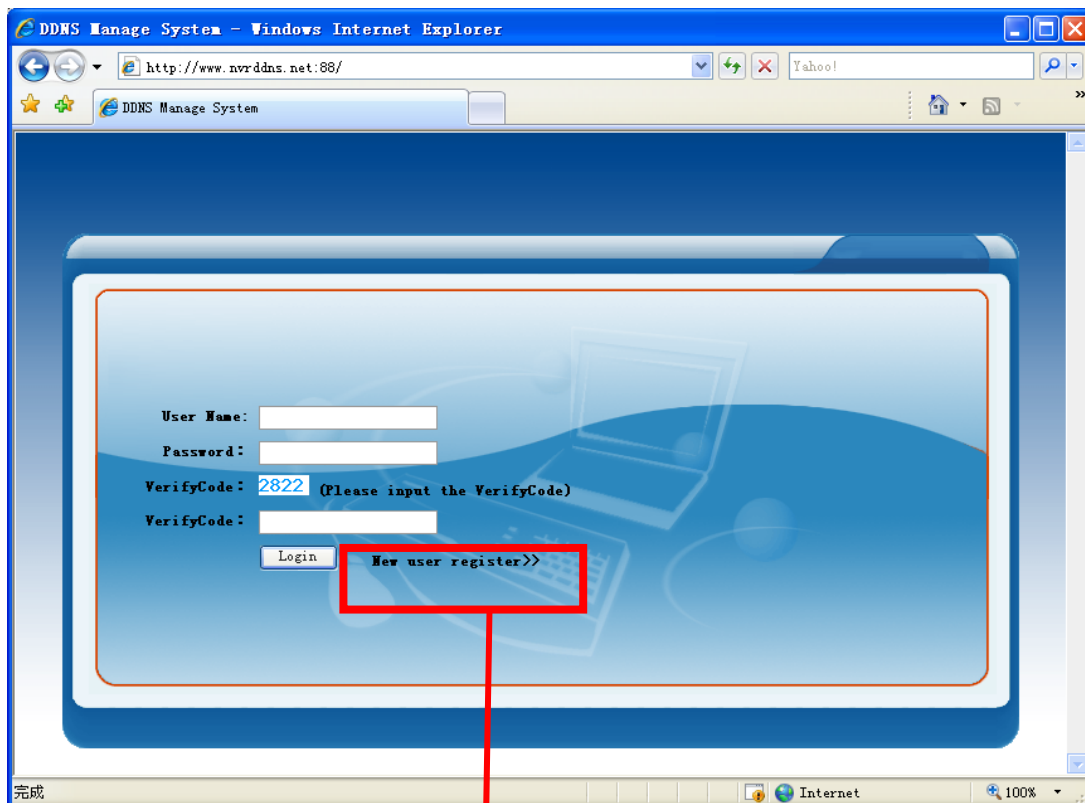


Four, domain name management system instructions: (don't need domain name management function, can need not setting)

(DuoGe domain name can be unified management, do not need to remember all domain names, just login www.nvrddns.net can view all DVR, IPC in information domain name report.)

Apply for the domain name manager users:

Open the domain name management system home page: "http://www.nvrddns.net > (web sites in English www.nvrddns.net:88)

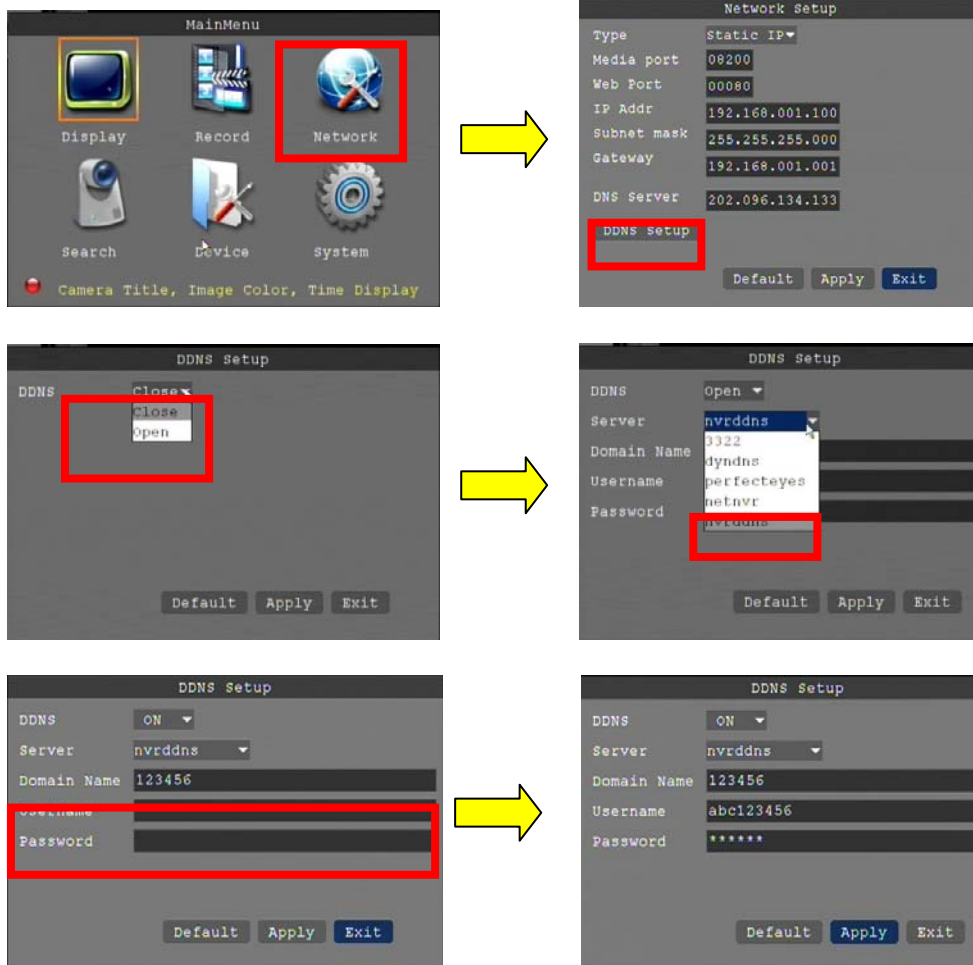


User Register	
User Name*:	<input type="text"/>
Password*:	<input type="text"/>
Confirm Password*:	<input type="text"/>
Unit Name*:	<input type="text"/>
Contact*:	<input type="text"/>
Comm Address*:	<input type="text"/>
	<input type="button" value="Confirm"/> <input type="button" value="Return"/>

Corresponding to the input the information needed to fill in the input, complete click the submit, tip registration success.

User name and password registration successful, into the DVR host will registered user name and password to fill corresponding in.

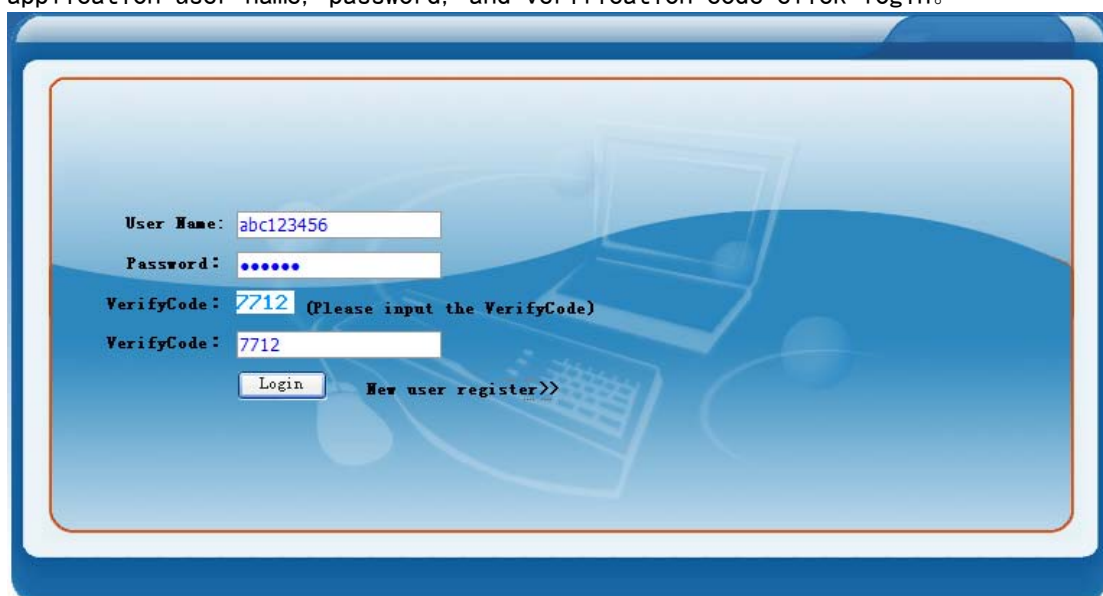
The main menu-> network Settings-> DDNS Settings-> > choose NVRDDNS enable domain name-(pictured)



Click ok and exit, fill out the forms, the DVR after the DVR NVRDDNSR would active domain name, please report to the domain name manager website user information, then enter into a domain name management system to check information domain name

View the domain name information

Open the domain name management system home page: "http://www.nvrddns.net:88" enter the application user name, password, and verification code click login.



The user can view into the interface under the application for all domain names

(pictured)

The screenshot shows a web browser window titled "DDNS Manage System - Windows Internet Explorer". The address bar displays "http://www.nvrddns.net:88/?mods=index". The page has a blue header with navigation links: HOME, Support, HELP, Logout. Below the header, a welcome message says "Welcome : abc123456". A sidebar on the left contains "System Manage" and "Place : Device Manage". The main content area displays a table with one device entry. The table has columns: DeviceID, User, Device Name, Domain, IP Address, Data Port, Update Time, State, and Operation. The single entry has DeviceID 448857, User abc123456, Device Name DMS8204, Domain http://123456.nvrddns.net:88, IP Address 219.134.224.218, Data Port 8400, Update Time 2011-10-11 10:37:29, State Online, and Operation Delete. Below the table are pagination controls showing "Shows 1-1 , Total 1 1/1" and "Goto 1 Page".

DeviceID	User	Device Name	Domain	IP Address	Data Port	Update Time	State	Operation
448857	abc123456	DMS8204	http://123456.nvrddns.net:88	219.134.224.218	8400	2011-10-11 10:37:29	Online	Delete